

OPERATION AND PARTS MANUAL

MQ POWER DCA-125SSJU DCA-125SSJU2 PORTABLE GENERATOR (STANDARD)

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PARTS LIST NO. 3870300064A
S/N7500469 UP TO 7500507-125SSJU
S/N FROM 7500508-125SSJU2

Revision #4 (06/03/03)



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SERVICE DEPARTMENT:

800-835-2551
FAX: 310-638-8046



WARNING



CALIFORNIA--Proposition 65 Warning

Engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

HERE'S HOW TO GET HELP

*PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING*

PARTS DEPARTMENT

800-427-1244 or 310-537-3700

FAX: 800-672-7877 or 310-637-3284

SERVICE DEPARTMENT

800-421-1244

FAX: 310- 537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310- 631-5032

WARRANTY DEPARTMENT

888-661-4279, or 310-661-4279

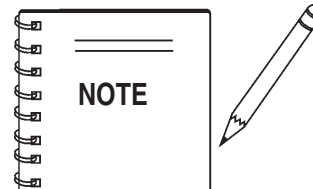
FAX: 310- 537-1173

DCA-125SSJU & DCA-125SSJU2 AC GENERATOR

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Specification and part number are subject to change without notice.

PARTS ORDERING PROCEDURES

When ordering parts, please supply the following information:

- ☐ Dealer account number
- ☐ Dealer name and address
- ☐ Shipping address (if different than billing address)
- ☐ Return fax number
- ☐ Applicable model number
- ☐ Quantity, part number and description of each part
- ☐ Specify preferred method of shipment:
 - ✓ FedEx or UPS Ground
 - ✓ FedEx or UPS Second Day or Third Day
 - ✓ FedEx or UPS Next Day
 - ✓ Federal Express Priority One
 - ✓ DHL
 - ✓ Truck

Note: Unless otherwise indicated by customer, all orders are treated as "Standard Orders", and will ship within 24 hours. We will make every effort to ship "Air Shipments" the same day that the order is received, if prior to 2PM west coast time. "Stock Orders" must be so noted on fax or web forms.



Here's how to get help...

Please have the model and serial number on hand when calling.

Parts Department

800-427-1244
310-537-3700

Fax: 800-672-7877
Fax: 310-637-3284

Mayco Parts

800-306-2926
310-537-3700

Fax: 800-672-7877
Fax: 310-637-3284

Service Department

800-478-1244
310-537-3700

Fax: 310-537-4259

MQ Power Service Department

800-835-2551
310-537-3700

Fax: 310-638-8046

Warranty Department

800-421-1244, Ext. 279
310-537-3700, Ext. 279

Fax: 310-537-1173

Multiquip's Main Phone Numbers

800-421-1244
310-537-3700

Fax: 310-537-3927

Place Your Parts Order Via Web or Fax For Even More Savings!

Extra Discounts!

All parts orders which include complete part numbers and are received by our automated web parts order system, or by fax qualify for the following extra discounts:

Ordered via	Standard orders	Stock orders (\$750 list and above)
Fax	3%	10%
Web	5%	10%

Special freight allowances when you order 10 or more line items via Web or Fax! **

FedEx Ground Service **at no charge for freight**

No other allowances on freight shipped by any other carrier.

NOTE: DISCOUNTS ARE SUBJECT TO CHANGE



MULTIQUIP INC.

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E-MAIL: mq@multiquip.com
WWW: multiquip.com

Direct TOLL-FREE access to our Parts Department:

Toll-free nationwide — 800-427-1244

DCA-125SSJU SERIES — SPECIFICATIONS

Table 1. Generator Specifications

Model	DCA-125SSJU/125SSJU2	
Type	Revolving field, self ventilated, drip proof single bearing	
Armature Connection	Star with Neutral/Zig Zag	
Voltage 3-Phase	208, 220, 240, 416, 440, 480V switchable	
Voltage Single-Phase	120, 127, 139, 240, 254, 277V switchable	
Standby Output	137.5 KVA (110 KW)	
Prime Output	125 KVA (100 KW)	
Frequency	60 Hz	
Speed	1800 rpm	
Power Factor	0.8	
Sound Level dB (A) Full Load at 23 feet	67	
Insulation	Class F	
Engine Specifications		
Model	JOHN DEERE 6068TF250	
Type	4 Cycle, water-cooled, direct injection, turbo-charged	
No. of Cylinders	6 cylinders	
Bore x Stroke	(106 mm x 127 mm)	
Rated Output	150 HP/1800 rpm	
Displacement	410 cu. in. (6724 cc)	
Starting	Electric	
Coolant Capacity	10.3 gal. (39 liters)	
Lube Oil Capacity	4.5 gal. (17 liters)	
Fuel Consumption	7.5 gal(28.4L)/hr at full load	5.7 gal(21.6L)/hr at 3/4 load
	4.0 gal(15.1L)/hr at 1/2 load	2.3gal(8.7L)/hr at 1/4 load
Battery	12V- 150 AH x1	
Fuel	#2 Diesel Fuel	

DCA-125SSJU SERIES — DIMENSIONS

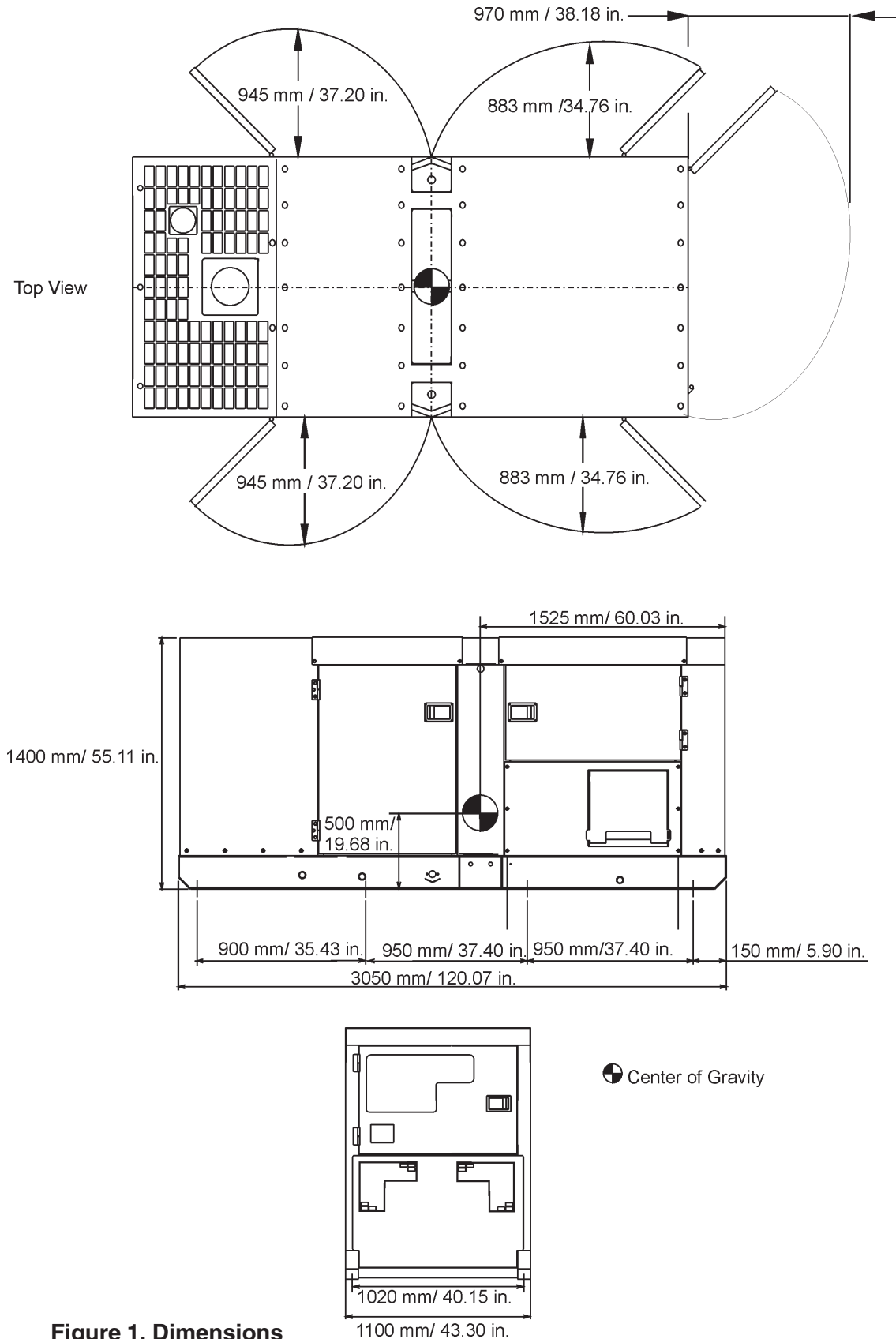
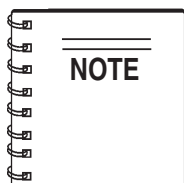


Figure 1. Dimensions

DCA-125SSJU SERIES — SAFETY MESSAGE ALERT SYMBOLS

FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operating Instructions could result in injury to yourself and others.



This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of the MQ Power *Model DCA125SSJU Series WHISPERWATT™ GENERATOR.*

Before using this GENERATOR, ensure that the operating individual has read and understands all instructions in this manual.

SAFETY MESSAGE ALERT SYMBOLS

The three (3) Safety Messages shown below will inform you about potential hazards that could injure you or others. The Safety Messages specifically address the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.



DANGER: You **WILL** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.



WARNING: You **CAN** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.



CAUTION: You **CAN** be injured if you **DO NOT** follow directions.

Potential hazards associated with trowel operation will be referenced with "**Hazard Symbols**" which appear throughout this manual, and will be referenced in conjunction with Safety "**Message Alert Symbols**".

HAZARD SYMBOLS



Lethal Exhaust Gases



Engine exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled. **NEVER** operate this equipment in a confined area or enclosed structure that does not provide ample free flow air.



Explosive Fuel



Diesel fuel is extremely flammable, and its vapors can cause an explosion if ignited. **DO NOT** start the engine near spilled fuel or combustible fluids. **DO NOT** fill the fuel tank while the engine is running or hot. **DO NOT** overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system. Store fuel in approved containers, in well-ventilated areas and away from sparks and flames. **NEVER** use fuel as a cleaning agent.



Burn Hazards



Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operations. **NEVER** operate the engine with heat shields or heat guards removed.



Rotating Parts



NEVER operate equipment with covers, or guards removed. Keep **fingers, hands, hair** and **clothing** away from all moving parts to prevent injury.

DCA-125SSJU SERIES — SAFETY MESSAGE ALERT SYMBOLS



Accidental Starting



OFF

ALWAYS place the engine ON/OFF switch in the **OFF** position, when the trowel is not in use.



Respiratory Hazard



ALWAYS wear approved respiratory protection.



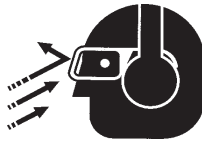
Over Speed Conditions



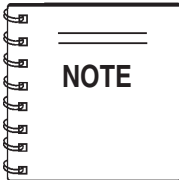
NEVER tamper with the factory settings of the engine governor or settings. Personal injury and damage to the engine or equipment can result if operating in speed ranges above maximum allowable.



Sight and Hearing hazard



ALWAYS wear approved eye and hearing protection.



This **generator**, other property, or the surrounding environment could be damaged if you do not follow instructions.



Equipment Damage Messages

Other important messages are provided throughout this manual to help prevent damage to your trowel, other property, or the surrounding environment.

DCA-125SSJU SERIES — RULES FOR SAFE OPERATION

CAUTION:



Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the **DCA-125SSJU Series Generator**:

GENERAL SAFETY

- **DO NOT** operate or service this equipment before reading this entire manual.



- This equipment should not be operated by persons under 18 years of age.

- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.

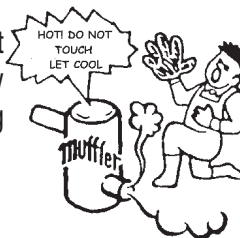


- **NEVER** operate this equipment under the influence of drugs or alcohol.



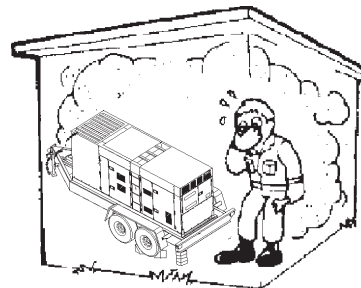
- **NEVER** use accessories or attachments, which are not recommended by MQ Power for this equipment. Damage to the equipment and/or injury to user may result.
- Manufacture does not assume responsibility for any accident due to equipment modifications.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- **ALWAYS** check the machine for loosened threads or bolts before starting.
- **NEVER** operate the generator in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe **bodily harm or even death**.

- **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or generator.



- **High Temperatures** – Allow the engine to cool before performing service and maintenance functions. Contact with **hot!** components can cause serious burns.

- The engine of this generator requires an adequate free flow of cooling air. **NEVER** operate the generator in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause serious damage to the generator or engine and may cause injury to people. The generator engine gives off **DEADLY** carbon monoxide gas.



- **ALWAYS** make sure generator is properly grounded.
- **NEVER** use gas piping as an electrical ground.
- **DO NOT** place hands or fingers inside generator engine compartment when engine is running.
- **ALWAYS** make sure generator installation is accordance with ***national and local electrical codes***.
- **ALWAYS** have a qualified electrician perform the generator wiring installation.
- **NEVER** power cables or cords ***lay in water***.
- **NEVER stand in water** while AC power from the generator is being transfer to a load.
- **NEVER** use a defective or frayed power cable. Check the cable for cuts in the insulation.
- **NEVER** use a extension cord that is frayed or damaged where the insulation has been cut.
- **ALWAYS** make certain that proper extension cord has been selected for the job See Table 5.
- The electrical voltage required to operate the generator can cause severe injury or even death through physical contact with live circuits. Turn all circuit breakers **OFF** before performing maintenance on the generator.

DCA-125SSJU SERIES — RULES FOR SAFE OPERATION

■ **ALWAYS** make sure that electrical circuits are properly **grounded** per the **National Electrical Code (NEC)** and local codes before operating generator. Severe ***injury or death!*** by electrocution can result from operating an ungrounded generator.

■ **ALWAYS** be sure the operator is familiar with proper safety precautions and operations techniques before using generator.

■ **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.

■ **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.



DANGER:



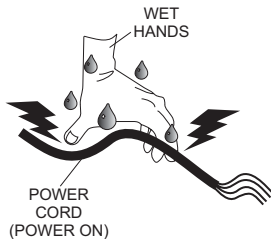
Never use damaged or worn cables when connecting equipment to the generator. Make sure power connecting cables are securely connected to the generator's output terminals, insufficient tightening of the terminal connections may cause damage to the generator and electrical shock.



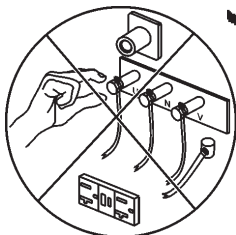
DANGER:



NEVER grab or touch a live power cord with wet hands, the possibility exists of electrical shock, electrocution, and even ***death!***

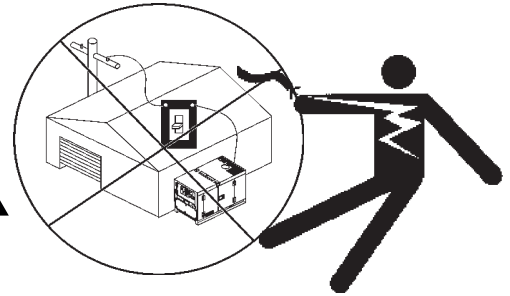
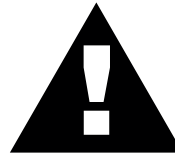


DANGER:



■ **NEVER** touch output terminals during operation. This is extremely dangerous. **ALWAYS** stop the machine and place the circuit breaker in the "**OFF**" position when contact with the output terminals is required. There exists the possibility of ***electrocution, electrical shock or burn, which can cause severe bodily harm or even death!***

DANGER:



■ Backfeed to a utility system can cause ***electrocution*** and or property damage. **DO NOT** connect to any building's electrical system except through an approved device or after building main switch is opened. **ALWAYS** have a licensed electrician perform the installation

CAUTION:



DO NOT touch or open any of the below mentioned components while the generator is running. Always allow sufficient time for the engine and generator to cool before performing maintenance.

Radiator

1. **Radiator Cap** - Removing the radiator cap while the engine is hot will result in high pressurized, boiling water to gush out of the radiator, causing severe scalding to any persons in the general area of the generator.
2. **Coolant Drain Plug** - Removing the coolant drain plug while the engine is hot will result in hot coolant to gush out of the coolant drain plug, therefore causing severe scalding to any persons in the general area of the generator.
3. **Engine Oil Drain Plug** - Removing the engine oil drain plug while the engine is hot will result in hot oil to gush out of the oil drain plug, therefore causing severe scalding to any persons in the general area of the generator.

Maintenance Safety

■ **NEVER** lubricate components or attempt service on a running machine.

■ **ALWAYS** allow the machine a proper amount of time to cool before servicing.



■ Keep the machinery in proper running condition.

■ Fix damage to the machine immediately and always replace broken parts.

DCA-125SSJU SERIES — RULES FOR SAFE OPERATION

- **NEVER** Run engine without air filter. Severe engine damage may occur.
- **ALWAYS** service air cleaner frequently to prevent engine malfunction.
- **ALWAYS** disconnect the **negative battery terminal** before performing service on the generator.
- **ALWAYS** be sure the operator is familiar with proper safety precautions when operating the generator set.
- **ALWAYS** store equipment properly when not in use.
- **DO NOT** leave the generator running in the **manual mode** unattended.
- **DO NOT** allow unauthorized people to operate this equipment.
- **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- Refer to the **John Deere Engine Manual** for engine technical questions or information.

DANGER:



Pay close attention to ventilation when operating the generator inside tunnels and caves. The engine exhaust contains noxious elements. Engine exhaust must be routed to a ventilated area.



Generator Grounding

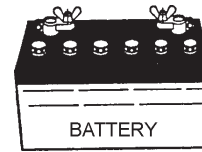
To guard against electrical shock and possible damage to the equipment, it is important to provide a good **EARTH** ground.

Article 250 (Grounding) of the **National Electrical Code** (NEC) provides guide lines for proper grounding and specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

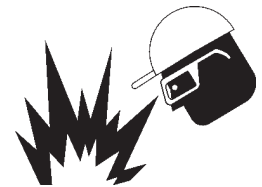
ALWAYS be sure to use the ground terminal (green wire) when connecting a load to the UVWO output terminals.

Battery

The battery contains acids that can cause injury to the eyes and skin. To avoid eye irritation, **always** wear safety glasses. Use well insulated gloves when picking up the battery. Use the following guidelines when handling the battery:



1. **DO NOT** drop the battery. There is the possibility of risk that the battery may explode.
2. **DO NOT** expose the battery to open flames, sparks, cigarettes etc. The battery contains combustible gases and liquids. If these gases and liquids come in contact with a flame or spark, an explosion could occur.
3. **ALWAYS** keep the battery charged. If the battery is not charged a buildup of combustible gas will occur.
4. **ALWAYS** keep battery charging and cables in good working condition. Repair or replace all worn cables.
5. **ALWAYS** recharge the battery in an vented air environment, to avoid risk of a dangerous concentration of combustible gases.
6. In case the battery liquid (dilute sulfuric acid) comes in contact with **clothing or skin**, rinse skin or clothing immediately with plenty of water.
7. In case the battery liquid (dilute sulfuric acid) comes in contact with your **eyes**, rinse eyes immediately with plenty of water, then contact the nearest doctor or hospital, and seek medical attention.



Transporting

- **ALWAYS** shutdown engine before transporting.
- Tighten both fuel tank caps securely.
- If generator is mounted on a trailer, make sure trailer complies with all local and state safety transportation laws. See next page "**Towing Safety Precautions**" for basic towing techniques.

DCA-125SSJU SERIES — RULES FOR SAFE OPERATION

Towing Safety Precautions

CAUTION:



Conform to **Department of Transportation (DOT) Safety Towing Regulations** before towing generator.

To reduce the possibility of an accident while transporting the generator on public roads, always make sure the trailer that supports the generator and the towing vehicle are in good operating condition and both units are mechanically sound.

The following list of suggestions should be used when towing your generator:

- Make sure the hitch and coupling of the towing vehicle are rated equal to, or greater than the trailer "gross vehicle weight rating" (GVWR) of 6,000 lbs.
- **ALWAYS** inspect the hitch and coupling for wear. **NEVER** tow a trailer with defective hitches, couplings, chains etc.
- Check the tire air pressure on both towing vehicle and trailer. **Trailer tires should be inflated to 50 psi cold.** Also check the tire tread wear on both vehicles.
- **ALWAYS** make sure the trailer is equipped with a "Safety Chain".
- **ALWAYS** attach trailer's safety chains to towing vehicle properly.
- **ALWAYS** make sure the vehicle and trailer directional, backup, brake, and trailer lights are connected and working properly.
- The maximum speed for highway towing is **45 MPH** unless posted otherwise. Recommended off-road towing is not to exceed **10 MPH** or less depending on type of terrain.
- Place **chock blocks** underneath wheel to prevent **rolling**, while parked.
- Use the trailer's swivel jack to adjust the trailer height to a level position while parked.
- Avoid sudden stops and starts. This can cause skidding, or jack-knifing. Smooth, gradual starts and stops will improve towing.
- Avoid sharp turns.
- Trailer should be adjusted to a level position at all times when towing.
- Raise and lock trailer wheel stand in up position when transporting.
- DOT Requirements include the following:
 - Connect and test electric brake operation.
 - Secure portable power cables in cable tray with tie wraps.

Emergencies

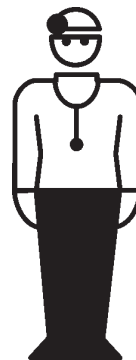
- **ALWAYS** know the location of the nearest **fire extinguisher**.



- **ALWAYS** know the location of the nearest and **first aid kit**.



- In emergencies **always** know the location of the nearest phone or **keep a phone on the job site**. Also know the phone numbers of the nearest **ambulance**, **doctor** and **fire department**. This information will be invaluable in the case of an emergency.



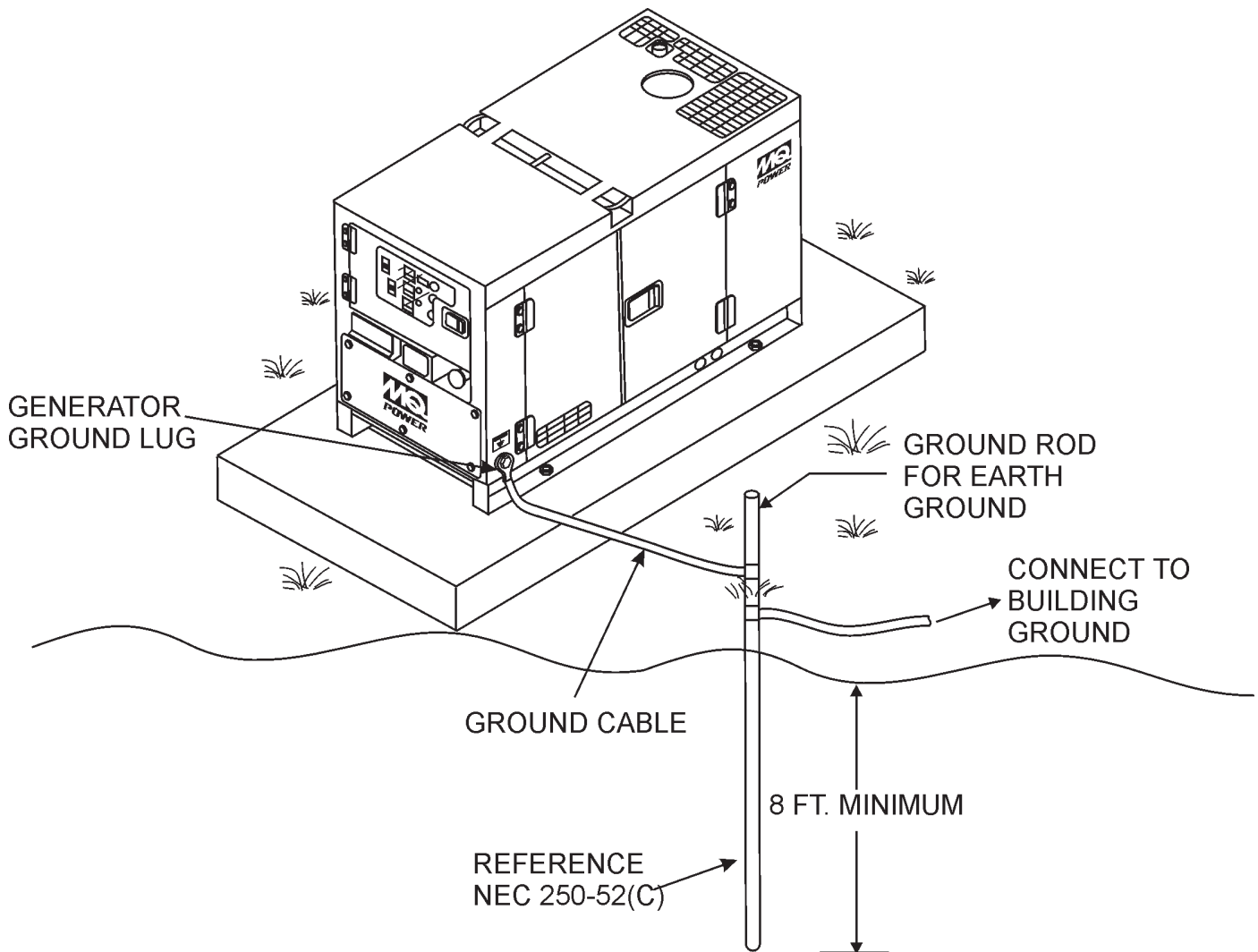


Figure 2. Typical Generator Grounding Application

Outdoor Installation

Install the generator in a area that is free of debris, bystanders, and overhead obstructions. Make sure the generator is on secure level ground so that it cannot slide or shift around. Also install the generator in a manner so that the exhaust will not be discharged in the direction of nearby homes.

The installation site must be relatively free from moisture and dust. All electrical equipment should be protected from excessive moisture. Failure to do will result in deterioration of the insulation and will result in short circuits and grounding.

Foreign materials such as dust, sand, lint and abrasive materials have a tendency to cause excessive wear to engine and alternator parts.

CAUTION:



Pay close attention to ventilation when operating the generator inside tunnels and caves. The engine exhaust contains noxious elements. Engine exhaust must be routed to a ventilated area.

Indoor Installation

Exhaust gases from diesel engines are extremely poisonous. Whenever an engine is installed indoors the exhaust fumes must be vented to the outside. The engine should be installed at least two feet from any outside wall. Using an exhaust pipe which is too long or too small can cause excessive back pressure which will cause the engine to heat excessively and possibly burn the valves.

Mounting

The generator must be mounted on a solid foundation (such as concrete) and set firmly on the foundation to isolate vibration of the generator when it is running. The generator must set at least 6 inches above the floor or grade level (in accordance to NFPA 110, Chapter 5-4.1). **DO NOT** remove the metal skids on the bottom of the generator. They are to resist damage to the bottom of the generator and to maintain alignment.

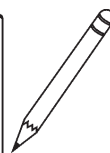
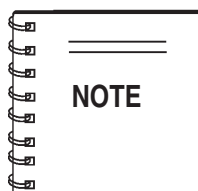
Generator Grounding

To guard against electrical shock and possible damage to the equipment, it is important to provide a good **EARTH** ground.

Article 250 (Grounding) of the National Electrical Code (NEC) provides guide lines for proper grounding and specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

NEC articles 250-64(b) and 250-66 set the following grounding requirements:

1. Use one of the following wire types to connect the generator to earth ground.
 - a. Copper - 10 AWG (5.3 mm²) or larger.
 - b. Aluminum - 8 AWG (8.4 mm²) or larger.
2. When grounding the generator (Figure 2) connect the ground cable between the lock washer and the nut on the generator and tighten the nut fully. Connect the other end of the ground cable to earth ground.
3. NEC article 250-52(c) specifies that the earth ground rod should be buried a minimum of 8 ft. into the ground.



When connecting the generator to any buildings electrical system **ALWAYS** consult with a licensed electrician.

DCA-125SSJU SERIES — TOWING SAFETY PRECAUTIONS

Towing Safety Precautions

CAUTION:



Check with your local county or state safety towing regulations before towing your generator.

To reduce the possibility of an accident while transporting the generator on public roads, always make sure the trailer (Figure 4) that supports the generator and the towing vehicle are in good operating condition and both units are mechanically sound.

The following list of suggestions should be used when towing your generator:

- Make sure the hitch and coupling of the towing vehicle are rated equal to, or greater than the trailer "gross vehicle weight rating" (GVWR).
- **ALWAYS** inspect the hitch and coupling for wear. **NEVER** tow a trailer with defective hitches, couplings, chains etc.
- Check the tire air pressure on both towing vehicle and trailer. Also check the tire tread wear on both vehicles.
- **ALWAYS** make sure the trailer is equipped with a "Safety Chain".

- **ALWAYS** attach trailer's safety chain to bumper of towing vehicle.
- **ALWAYS** make sure the vehicle and trailer directional, backup, brake, and trailer lights are connected and working properly.
- The maximum speed for highway towing is **55 MPH** unless posted otherwise. Recommended off-road towing is not to exceed **15 MPH** or less depending on type of terrain.
- Place *chocked blocks* underneath wheel to prevent **rolling**, while parked.
- Place *support blocks* underneath the trailer's bumper to prevent **tipping**, while parked.
- Use the trailer's hand winch to adjust the height of the trailer, then insert locking pin to lock wheel stand in place, while parked.
- Avoid sudden stops and starts. This can cause skidding, or jackknifing. Smooth, gradual starts and stops will improve gas mileage.
- Avoid sharp turns to prevent rolling.
- Remove wheel stand when transporting.
- **DO NOT** transport generator with fuel in tank.

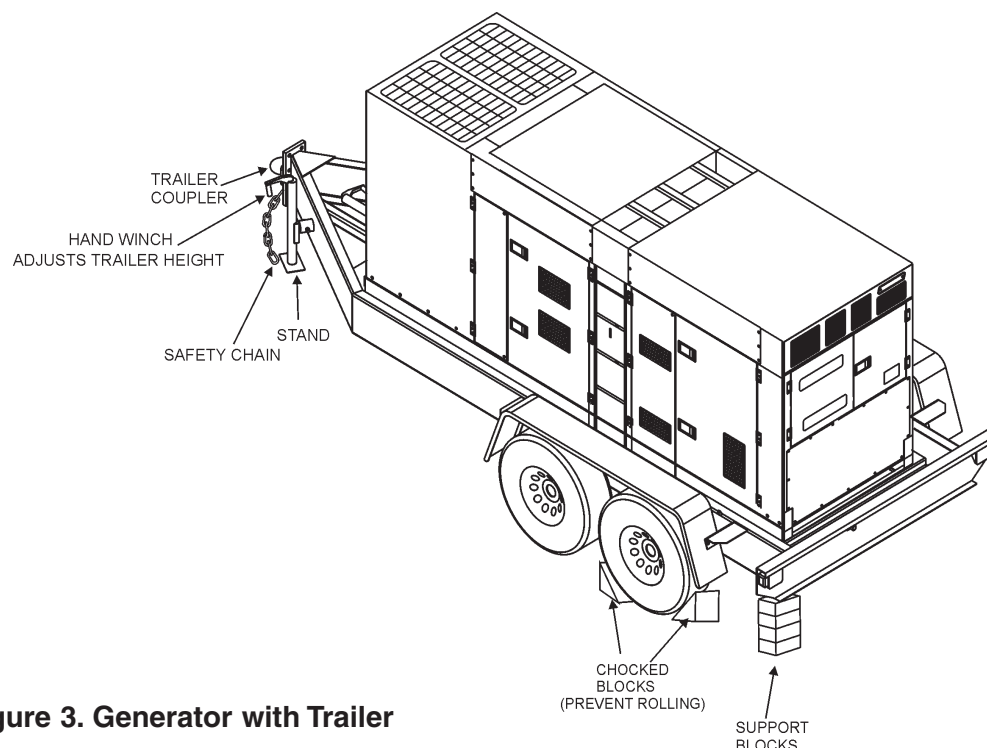


Figure 3. Generator with Trailer

CAUTION:



ALWAYS make sure the trailer is in good operating condition. Check the tires for proper inflation and wear. Also check the wheel lug nuts for proper tightness.

Explanation of Chart:

This section is to provide the user with trailer service and maintenance information. The service and maintenance guidelines referenced in this section apply a wide range of trailers. Remember periodic inspection of the trailer will ensure safe towing of the equipment and will prevent damage to the equipment and personal injury.

It is the purpose of this section to cover the major maintenance components of the trailer. The following trailer components will be discussed in this section:

- Brakes
- Tires
- Lug Nut Torquing
- Suspension
- Electrical
- Brake Troubleshooting Tables

Use the following definitions when reading Table 2.

1. **Fuel Cell** - Provides an adequate amount of fuel for the equipment in use. Fuel cells must be empty when transporting equipment.
2. **Braking System** - System employed in stopping the trailer. Typical braking systems are electric, surge, hydraulic, hydraulic-surge and air.
3. **GVWR**- Gross Vehicle Weight Rating (GVWR), is the maximum number of pounds the trailer can carry, including the fuel cell (empty).
4. **Frame Length** - Measurement is from the ball hitch to the rear bumper (reflector).
5. **Frame Length** - Measurement is from fender to fender
6. **Jack Stand** - Trailer support device with maximum pound requirement from the tongue of the trailer.
7. **Coupler** - Type of hitch used on the trailer for towing.
8. **Tire Size** - Indicates the diameter of the tire in inches (10,12,14, etc.), and the width in millimeters (175,185,205, etc.). The tire diameter must match the diameter of the tire rim.
9. **Tire Ply** - The tire ply (layers) number is rated in letters; 2-ply,4-ply,6-ply, etc.
10. **Wheel Hub** - The wheel hub is connected to the trailer's axle.
11. **Tire Rim** - Tires mounted on a tire rim. The tire rim must match the size of the tire.
12. **Lug Nuts** - Used to secure the wheel to the wheel hub. Always use a torque wrench to tighten down the lug nuts. See Table 17 and Figure 67 for lug nut tightening and sequence.
13. **Axle** - Indicates the maximum weight the axle can support in pounds, and the diameter of the axle expressed in inches. Please note that some trailers have a double axle. This will be shown as 2-6000 lbs., meaning two axles with a total weight capacity of 6000 pounds.
14. **Suspension** - Protects the trailer chassis from shocks transmitted through the wheels. Types of suspension used are leaf, Q-flex, and air ride.
15. **Electrical** - Electrical connectors (looms) are provided with the trailer so the brake lights and turn signals can be connected to the towing vehicle.
16. **Application** - Indicates which units can be employed on a particular trailer.

DCA-125SSJU SERIES — TRAILER SPECIFICATIONS

Table 2. Trailer Specifications

MODEL	APPLICATION	FUEL CELL	BRAKE SYSTEM	GVWR	FRAME LENGTH	FRAME WIDTH	JACK STAND
TRLR-10W	SDW225, SGW250, TLW-300	NO	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-10	DCA10, TLG12, DCA-15	NO	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-10XF	DCA10, TLG-12, DCA15, TLW-300	52 GAL	NO	1900LBS	96"	50"	800LB. FULL TILT WHEEL
TRLR-225W	WELDERS, DA7000SS	NO	NO	2200LBS	85"	42"	800LB. FULL TILT WHEEL
TRLR-BLW400	BLW-400	NO	ELECTRIC	2700LBS	W/MAST 154" W/O 124"	55" (78" TALL)	800LB. FULL TILT WHEEL
TRLR-50X	DCA-25	NO	NO	2700LBS	124"	55"	800LB. FULL TILT WHEEL
TRLR-50XF	DCA-25	41 GAL	NO	2700LBS	124"	55"	800LB. FULL TILT WHEEL
TRLR-70W	DCA-45, -60, 70	NO	SURGE	7000LBS	186"	77"	2000LB. FLAT PAD
TRLR-70X	DCA-45, -60, 70	OPT	SURGE	7000LBS	138"	66"	2000LB. FLAT PAD
TRLR-70XF	DCA-45, -60, 70	53 GAL	SURGE	7000LBS	138"	66"	2000LB. FLAT PAD
TRLR-100XF	DCA-100, 125	150 GAL	HYDRAULIC SURGE	7000LBS	190"	76"	2000LB. FLAT PAD
TRLR-85/125	DCA-85, 100, 125	145 GAL	HYDRAULIC	10000LBS	186"	77"	2000LB. FLAT PAD
TRLR-150XF	DCA-150, 180	200 GAL	HYDRAULIC SURGE	11160LBS	204"	84"	5000 LB. FLAT PAD
TRLR-220XF	DCA-220	250 GAL	HYDRAULIC SURGE	14000LBS	222"	83"	5000 LB. FLAT PAD
TRLR-300XF	DCA-300	250 GAL	HYDRAULIC SURGE	18000LBS	238"	83"	5000 LB. FLAT PAD
TRLR-400XF	DCA-400	350 GAL	ELECTRIC	18000LBS	238"	83"	5000 LB. FLAT PAD
TRLR-600XF	DCA-600, 800	550 GAL	AIR	30000LBS	384"	96"	5000 LB. FLAT PAD
TRLR-800SX	DCA-600, 800	550 GAL	AIR	30000LBS	384"	96"	5000 LB. FLAT PAD

DCA-125SSJU SERIES — TRAILER SPECIFICATIONS

Table 2. Specifications (Con't)

MODEL	COUPLER	TIRES	WHEELS	AXLE	HUBS	SUSPENSION	ELECTRICAL
TRLR-10W	2" BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.50"	2200# 2X2	5 LUG	3 LEAF	4 WIRE LOOM W/ 4 POLE FLAT
TRLR-10	2" BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-10XF	2" BALL CLASS 2 ADJUSTABLE	175-13C	13"X4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-225W	2" BALL CLASS 2 ADJUSTABLE	175-13B	13X4.5"	2200#2X2	5 LUG	Q FLEX	4 POLE FLAT
TRLR-BLW 400	2" BALL CLASS 2 ADJUSTABLE	175-13C	13 X 4.5"	2200#2X2	5 LUG	3 LEAF	4 POLE FLAT
TRLR-50X	2" BALL CLASS	B78-13LRC	13"X4.50"	3500lbs. 2-3/8"	5 LUG	4 LEAF	4 POLE RUBBER FLAT
TRLR-50XF	2" BALL CLASS	B78-13LRC	13"X4.50"	3500lbs. 2-3/8"	5 LUG	4 LEAF	4 POLE RUBBER FLAT
TRLR-70W	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs. 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-70X	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-70XF	2" BALL CLASS 3" ADJUSTABLE	205-14C BIAS (4)	14"X5"	3500lbs. 3"	5 LUG	5 LEAF	4 POLE RUBBER FLAT
TRLR-100XF	ADJUSTABLE 2- 5/6 OPT 3" EYE	205-15C BIAS (4)	14"X5.5"	3500lbs 3"	5 LUG	5 LEAF	4 WIRE LOOM
TRLR-85/125	ADJUSTABLE 2- 5/6 OPT 3" EYE	ST225/75R15D RADIAL (4)	14"x6"	(2)-6000lbs	6 LUG	7 LEAF	4 WIRE LOOM
TRLR-150XF	3" BALL EYE	750-16 E BIAS (4)	16"X7"	(2)-6000lbs	8 LUG	7 LEAF	4 WIRE LOOM
TRLR-220XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(4)	16"X7"	(2)-7000lbs	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-300XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(6)	16"X7"	(2)-6000lbs	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-400XF	3" EYE ADJUSTABLE	ST235/85R16E RADIAL(6)	16"X7"	(3)-7000lb- s.	8 LUG	Q FLEX	4 WIRE LOOM
TRLR-600XF	5TH WHEEL	ST215/75R17.5H RADIAL (8)	16"X7"	(3)-10000l- bs	8 LUG	7 LEAF	6 WIRE LOOM
TRLR-800AR	5TH WHEEL	ST215/75R17.5H RADIAL (8)	16"X7"	(3)-10000l- bs	8 LUG	AIR-RIDE	6 WIRE LOOM

DCA-125SSJU SERIES — GENERATOR DECALS

The DCA-125SSJU Series generator is equipped with a number of safety decals. These decals are provided for operator safety and maintenance information. The illustration below and on the preceding page show the decals as they appear on the machine. Should any of these decals become unreadable, replacements can be obtained from your dealer.

OPERATING PROCEDURES

Manual Starting

1. Check the engine oil, coolant, and fuel levels. Replenish if necessary.
2. Place all Generator Circuit Breakers in the "OFF" position and close all doors.
3. Check that the Voltage select switch (or the Voltage change-over board) is present at desired voltage.
(In case of generator having multiple voltage ratings.)
4. Set the Engine speed switch to the "LOW" position.
5. Turn the Auto-Off/Reset-Manual switch to the "Manual" position to start the engine. If the engine fails to start in the specified number of attempts, the overcrank lamp will indicate and the Auto-Off/Reset-Manual switch must be returned to the "Off/Reset" position before proceeding.
6. When the engine is ready for starting during cold weather operating conditions, push the intake heater button for approximately 30 seconds. Start engine using the Auto-Off/Reset-Manual switch to the "Manual" position. As soon as the engine starts, release the button.
7. If the engine still does not start, utilize the water heater until water is warm. (If additional water heater is supplied.)
8. After starting, allow the engine to run for 1 or 2 minutes to warm-up. At temperatures below freezing, this time period must be extended to 2 to 4 minutes.
9. When the engine starts, immediately check for abnormal noise, vibration, fluid leakage or any indication of a problem. Check the control panel gauges. If all is normal, let the engine remain at the "Low" position for a short time, depending on the ambient conditions, warm up.
10. After sufficient warm-up time has elapsed, set the Engine speed switch to the "High" position and the unit is ready for operation.
11. Check the NO Load speed as shown in the table below.
60Hz operation—Approx. 60.0Hz (1800rpm)
12. Adjust the Voltage Regulator to the specified voltage.

M35200010

P/N M352000103

Manual Stopping

1. Place the Generator Circuit Breakers in the "OFF" position.
2. Set the Engine speed switch to the "LOW" position, and allow the unit to cool for a few minutes.
3. Turn the Auto-Off/Reset-Manual switch, to the "Off/Reset" position.

Auto Starting/Stopping

1. With the Auto/Manual switch in the Auto position, the Auto Starting/Stopping controller monitors remote start contacts. Closure of the remote start contacts will begin engine cranking. When the contacts are opened cranking will stop or if running the engine will stop. All functions for the Automatic shutdown System work as in Manual Starting/Stopping.
2. For cold weather conditions utilize the water heater until water is warm. If the engine still does not start, please operate as in Manual Starting.

Emergency Stopping

1. Place the Generator Circuit Breakers in the "OFF" position.
2. Turn the Auto-Off/Reset-Manual switch to the "Off/Reset" position.

SAFETY INSTRUCTIONS

Improper operation of this machine can cause severe injury or death.

- Read the instruction manual carefully before operating or servicing.

This machine should only be operated by a person with sufficient knowledge and skill to ensure safe operation.

High voltage circuits are located inside the output terminal cover and control panel.

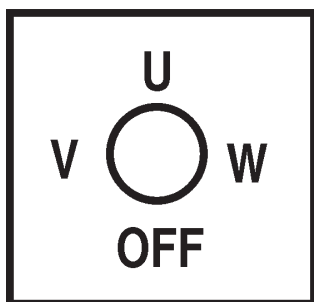
- Close the cover and control panel before operating.

Moving parts and hot surfaces are contained within the enclosure.

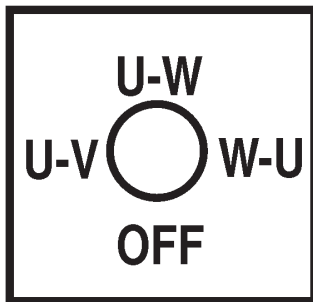
- Close all doors and lock them before operating.

M92010030

P/N M9520100304



P/N M9520000104



P/N M9520000204

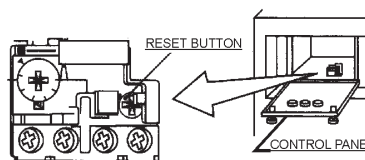


M9000000

P/N M950000004

OVER CURRENT RELAY

If it is Impossible to reset the CIRCUIT BREAKER, open the control panel and push the RESET BUTTON as below.



M92020010

P/N M9520200104



P/N M9510200002



P/N M9500300104



P/N M9500300004



M90050010

P/N M9500500104

DIESEL FUEL

M90050000

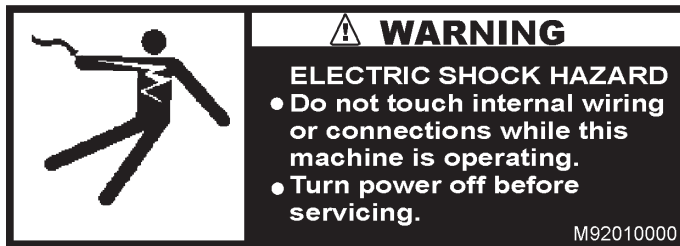
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WATER • OIL CHECK AND FILL DAILY

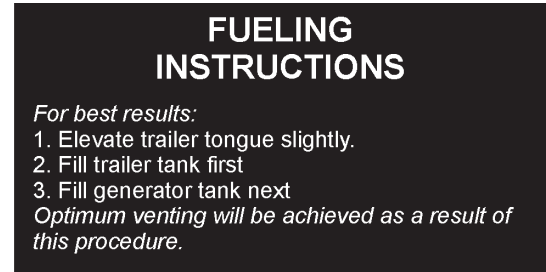
M90300010

P/N M9503000103

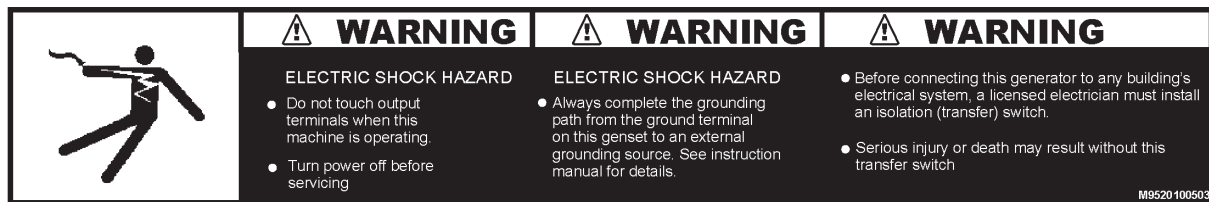
DCA-125SSJU SERIES — GENERATOR DECALS



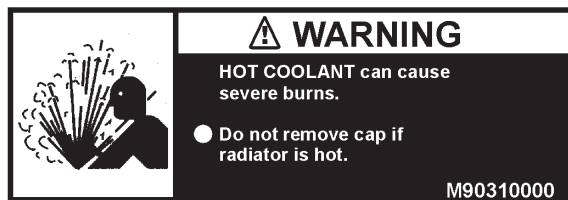
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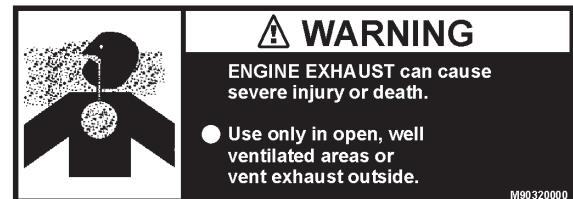
P/N TBD



P/N M9520100503



P/N M9503100004



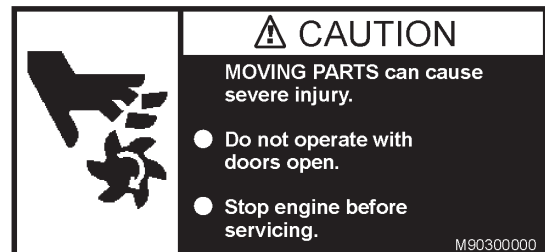
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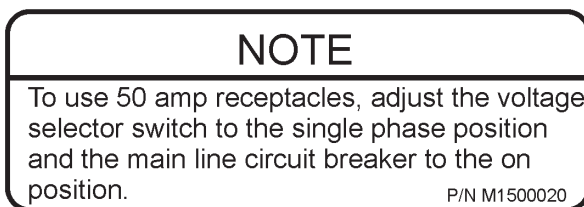
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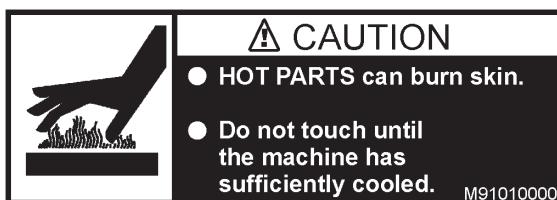
P/N M9520100204



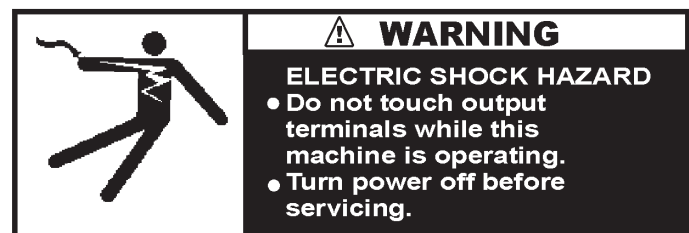
P/N M9503000004



P/N M1550000204



P/N M9510100004



P/N M9520100503

DCA-125SSJU Series Familiarization

Generator

The MQ Power DCA-125SSJU Series is a 100 kW **generator** (Figure 4) that is designed as a high quality portable (requires a trailer for transport) power source for telecom sites, lighting facilities, power tools, submersible pumps and other industrial and construction machinery.

Engine Operating Panel

The "Engine Operating Panel" is provided with the following:

- Tachometer
- Water Temperature Gauge
- Oil Pressure Gauge
- Charging Ammeter Gauge
- Engine Throttle Handle (Up to S/N 77500507)
- Fuel Level Gauge
- Engine Speed Switch (S/N 7500508~)
- Cold Starting Button
- Panel Light
- Panel Light Switch
- Ignition/Preheat Switch (Up to S/N 77500507)
- Auto ON/OFF Engine Controller (S/N 7500508~)

Generator Control Panel

The "Generator Control Panel" is provided with the following:

- Output Voltage Adjustment Knob
- Frequency Meter (Hz)
- AC Ammeter (Amps)
- AC Voltmeter (Volts)
- Ammeter Change-Over Switch
- Voltmeter Change-Over Switch
- Voltage Regulator
- Over-Current Relay

Output Terminal Panel

The "Output Terminal Panel" is provided with the following:

- Three 250 VAC output receptacles (CS-6369), 50 amps
- Three auxiliary circuit breakers, 250V @ 50 amps
- Two 125 VAC output receptacles, (GFCI), 20 amps
- Two GFCI circuit breakers, 120V @ 20amps
- Five output terminal lugs (3Ø power)

Control Box

The "Control Box" is provided with the following:

- 3-Pole, 300 amp Main Circuit Breaker
- Automatic Voltage Regulator
- Current Transformer
- Emergency Relay

Open Delta Excitation System

The DCA-125SSJU Series Generator is equipped with the state of the art "**Open-Delta**" excitation system. The open delta system consist of an electrically independent winding wound among stationary windings of the AC output section.

There are four connections of the open delta A, B, C and D. During steady state loads, the power from the voltage regulator is supplied from the parallel connections of A to B, A to D, and C to D. These three phases of the voltage input to the voltage regulator are then rectified and are the excitation current for the exciter section.

When a heavy load, such as a motor starting or a short circuit occurs, the automatic voltage regulator (AVR) switches the configuration of the open delta to the series connection of B to C. This has the effect of adding the voltages of each phase of provide higher excitation to the exciter section and thus better voltage response during the application of heavy loads.

The connections of the AVR to the AC output windings are for sensing only. No power is required from these windings.

The open-delta design provides virtually unlimited excitation current, offering maximum motor starting capabilities. The excitation does not have a "**fixed ceiling**" and responds according the demands of the required load.

Engine

The **DCA-125SSJU Series Generator** is powered by a 4 cycle, water cooled, turbocharged **John Deere Model 6068TF250 Diesel** engine. This engine is designed to meet every performance requirement for the generator. Reference Table 1 for engine specifications.

In keeping with MQ Power's policy of constantly improving its products, the specifications quoted herein are subject to change without prior notice.

Mechanical Governor System

The mechanical governor system control the RPM of the engine. When the engine demands increase or decrease, the mechanical governor system regulates the frequency variation to $\pm 5\%$. The electronic governor option increases frequency variation to $\pm 0.25\%$.

Extension Cables

When electric power is to be provided to various tools or loads at some distance from the generator, extension cords are normally used. Cables should be sized to allow for distance in length and amperage so that the voltage drop between the generator and point of use (load) is held to a minimum. Use the cable selection chart (Table 5) as a guide for selecting proper extension cable size.

DCA-125SSJU SERIES — MAJOR COMPONENTS

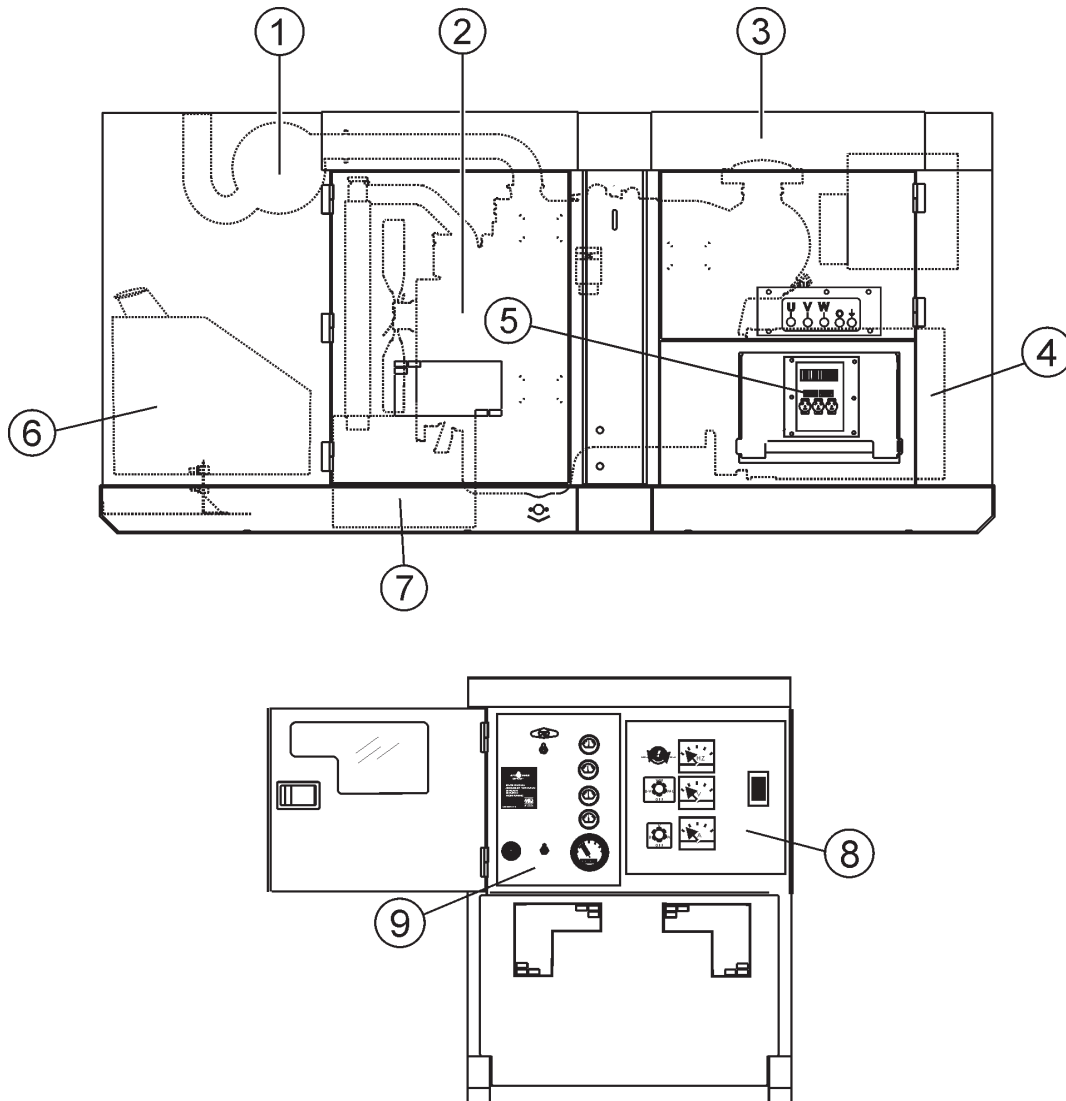


Table 3. Generator Major Components

ITEM NO.	DESCRIPTION
1	Muffler Assembly
2	Engine Assembly
3	Enclosure Assembly
4	Generator Assembly
5	Output Terminal Assembly
6	Fuel Tank Assembly
7	Battery Assembly
8	Generator Control Panel Assembly
9	Engine Operating Panel Assembly

DCA-125SSJU SERIES — GENERATOR CONTROL PANEL

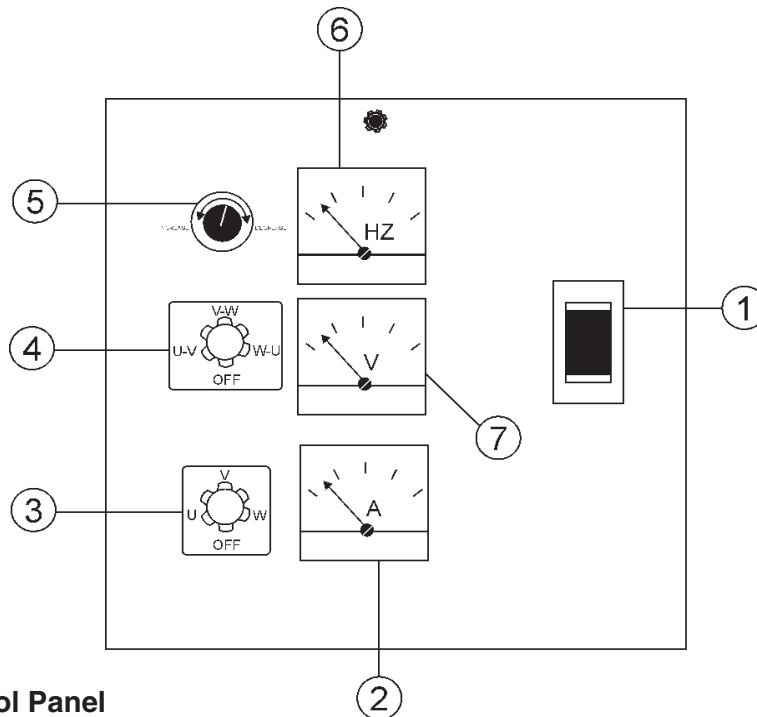


Figure 5. Generator Control Panel

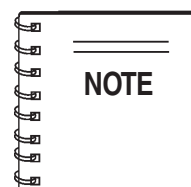
The definitions below describe the controls and functions of the DCA-125SSJU Series "**Generator Control Panel**" (Figure 5).

1. **Main Circuit Breaker** – This three-pole, 300 amp main breaker is provided to protect the **UVWO** output terminals from overload.
2. **AC Ammeter** – Indicates the amount of current the load is drawing from the generator per leg selected by the ammeter phase-selector switch.
3. **Ammeter Change-Over Switch** – This switch allows the AC ammeter to indicate the current flowing to the load connected to any phase of the output terminals, or to be switched off. This switch does not effect the generator output in any fashion, it is for current reading only.
4. **Voltmeter Change-Over Switch** – This switch allows the AC voltmeter to indicate phase to phase voltage between any two phases of the output terminals or to be switched off.
5. **Voltage Regulator Control** – Allows $\pm 15\%$ manual adjustment of the generator's output voltage.
6. **Frequency Meter** – Indicates the output frequency in hertz (Hz). Normally 60 Hz ± 1 Hz .
7. **AC Voltmeter** – Indicates the output voltage present at the **UVWO** terminals.

Located behind the generator control panel is the **Generator Control Box**. This box contains some of the necessary electronic components required to make the genertator function.

The "**Control Box**" is equipped with the following major components:

- Over-Current Relay
- Voltage Rectifier
- Starter Relay
- Engine Controller (Computer Controlled)
- Current Transformer
- Voltage Selector Switch



Remember the **overcurrent relay** monitors the current flowing from the **UVWO** output terminals to the load.

In the event of a short circuit or over current condition, it will automatically trip the main 250 amp breaker.

To restore power to the **UVWO** output terminals, press the **reset** button on the overcurrent relay and place the **main** circuit breaker in the **closed** position (**ON**).

DCA-125SSJU SERIES — ENGINE OPERATING PANEL

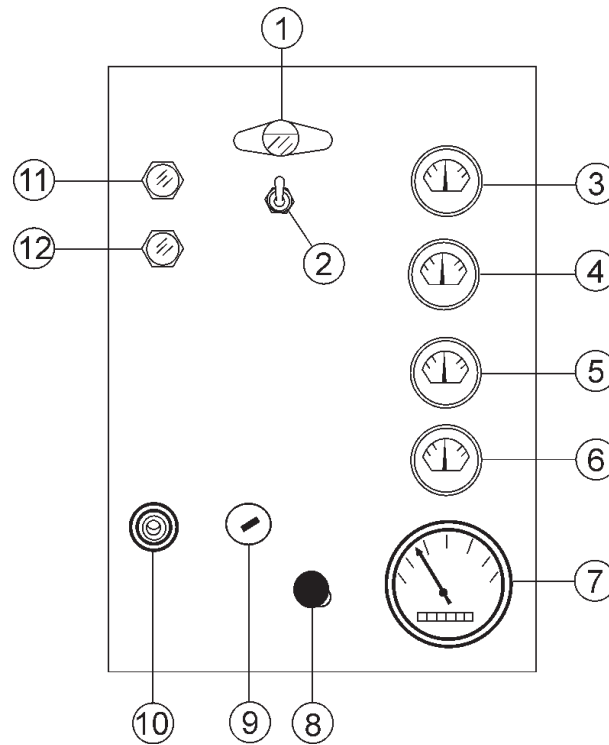


Figure 6. Engine Operating Panel Up To S/N 7500507

The definitions below describe the controls and functions of the DCA-125SSJU Series "**Engine Operating Panel**" (Figure 6), up to **S/N 7500507**.

1. **Panel Light** – Normally used in dark areas or at night time. When activated, panel lights will illuminate. When the generator is not in use be sure to turn the panel light switch to the OFF position.
2. **Panel Light Switch** – When activated will turn on control panel light.
3. **Oil Pressure Gauge** – During normal operation this gauge be should read in the "**GREEN**" zone. When starting the generator the oil pressure may read a little bit higher, but after the engine warms up the oil pressure should return to the green zone.
4. **Water Temperature Gauge** – During normal operation this gauge be should read in the "**GREEN**" zone.
5. **Charging Ammeter Gauge** – Indicates the current being supplied by the engine's alternator which provides current for generator's control circuits and battery charging system.
6. **Fuel Gauge** - Indicates amount of diesel fuel available.
7. **Tachometer** – Indicates engine speed in RPM's for 60 Hz operation. This meter should indicate 1800 RPM's when the rated load is applied. In addition a built in hour meter will record the number of operational hours that the generator has been in use.
8. **Engine Speed Throttle**- This lever controls the speed of the engine (low or high).
9. **Ignition Switch** – Turns the engine on, off or to preheat the engine.
10. **Cold Starting Button** – Used to warm the engine glow plugs in cold weather conditions. Press and hold the engine cold starting button until the button illuminates.
11. **Water Temperature Warning Light** - Indicates if the coolant is low. This warning will shut off the engine.
12. **Oil Pressure Warning Light** - This will indicate if the oil pressure is too low or high. This warning will shut off the engine.

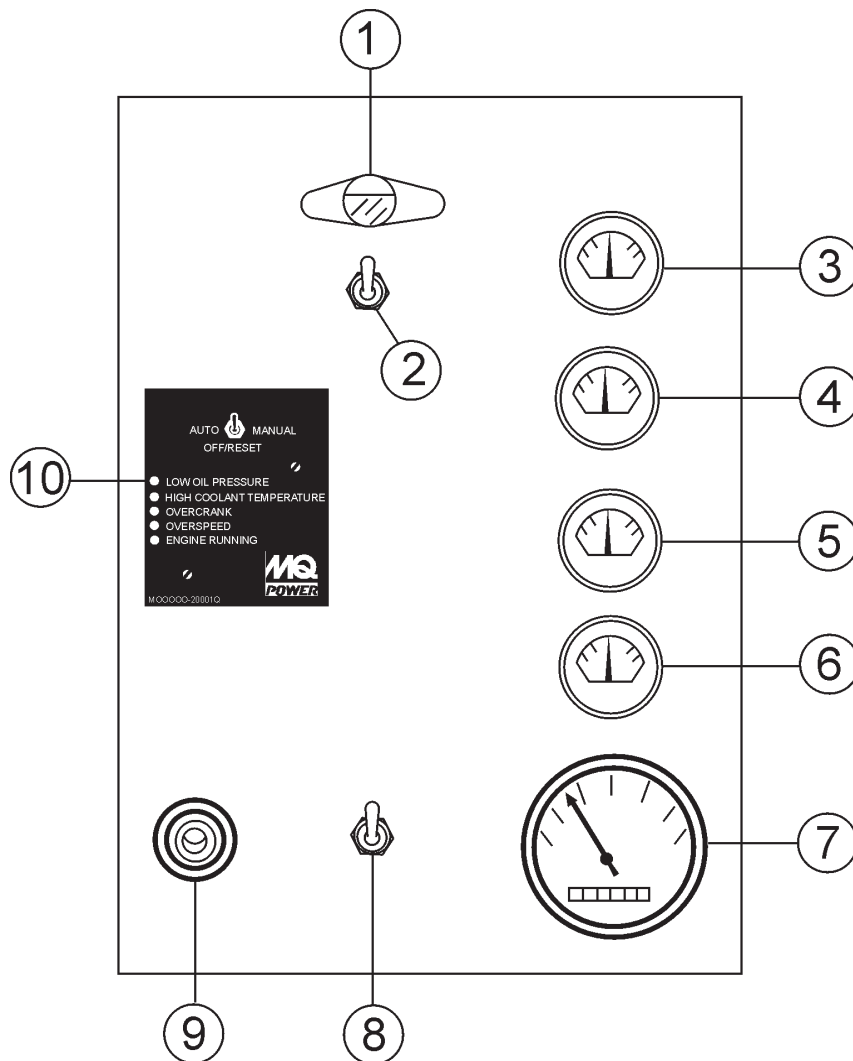


Figure 7. Engine Operating Panel From S/N 7500508

DCA-125SSJU SERIES — ENGINE OPERATING PANEL

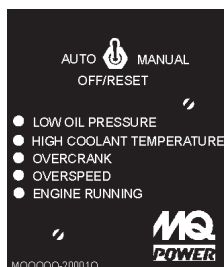
The definitions below describe the controls and functions of the DCA-125SSJU2 " **Engine Operating Panel** " (Figure 7) from **S/N 7500508 ~.**

1. **Panel Light** – Normally used in dark areas or at night time. When activated, panel lights will illuminate. When the generator is not in use be sure to turn the panel light switch to the **OFF** position.
2. **Panel Light Switch** – When activated will turn on control panel light.
3. **Oil Pressure Gauge** – During normal operation this gauge be should read between 42 to 71 psi. When starting the generator the oil pressure mar read a little bit higher, but after the engine warms up the oil pressure should return to the green zone.
4. **WaterTemperature Gauge** – During normal operation this gauge be should read between 165° and 203°F.
5. **Charging Ammeter Gauge** – Indicates the current being supplied by the engine's alternator which provides current for generator's control circuits and battery charging system.
6. **Fuel Gauge** - Indicates amount of diesel fuel available.
7. **Tachometer** – Indicates engine speed in RPM's for 60 Hz operation. This meter should indicate 1800 RPM's when the rated load is applied. In addition a built in hour meter will record the number of operational hours that the generator has been in use.
8. **Engine Speed Switch** - This switch controls the speed of the engine (low or high).
9. **Cold Starting Button** – Used to warm the engine glow plugs in cold weather conditions. Press and hold the engine cold starting button until the button illuminates.



COLD STARTING
BUTTON

10. **Auto On/Off Engine Controller** – This controller has a vertical row of status LED's (inset), that when lit, indicate that an engine malfunction (fault), has been detected. When a fault has been detected the engine controller will evaluate the fault. Any **major** fault will cause the controller to shutdown the generator.



During **cranking cycle**, The MPEC will attempt to crank the engine for 10 seconds before disengaging. If the engine does not engage (start) by the third attempt, the engine will be shutdown by the engine controller's " Over Crank Protection" mode. If the engine engages at a speed (RPM's) that is not safe, the controller will shutdown the engine by initializing the "**Over Speed Protection**" mode.

Also the engine controller will shutdown the generator in the event of low oil pressure, high coolant temperature, low coolant level, and loss of magnetic pickup. These conditions can be observed by monitoring the **LED** status indicators on the front of the controller module.

- A. **Off/Manual/Auto Switch** – This switch controls the running of the generator. If this switch is left in the "**OFF**" position, the generator will not run. When this switch is set to the **manual** position, the generator will start immediately.

If the generator is to be connected to a building's AC power source via a transfer switch (isolation), place the switch in the **auto** position. In this position the generator will monitor the AC line output from the building's power source.

- B. **Low Oil Pressure** – Indicates the engine pressure has fallen below 15 psi. The oil pressure is detected using variable resistive values from the oil pressure sending unit. This is considered a **major** fault.
- C. **High Coolant Temperature** – Indicates the engine temperature has exceeded 215° F. The engine temperature is detected using variable resistive values from the temperature sending unit. This is considered a **major** fault.
- D. **Overcrank Shutdown** – Indicates the unit has attempted to start a pre- programmed number of times, and has failed to start. The number of cycles and duration are programmable. It is pre-set at 3 cycles with a 10 second duration. This is considered a **major** fault.
- E. **Overspeed Shutdown** – Indicates the engine is running at an unsafe speed. This is considered a **major** fault.
- F. **Engine Running** – Indicates that engine is running at a safe operating speed.

DCA-125SSJU SERIES — OUTPUT TERMINAL PANEL FAMILIARIZATION

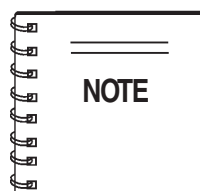
Output Terminal Familiarization

The “**Output Terminal Panel**” (Figure 8) is provided with the following:

- Three (3) 240V Output Receptacles, 50 amp
- Three (3) Circuit Breakers 240V @50 amps
- Two (2) 120V GFCI receptacles, 20 amp
- Two (2) GFCI Circuit Breakers 120V@ 20 amps
- One 300 Amp Main Circuit Breaker
- Five (5) Output Terminal Lugs

Output Terminal Panel

The **Output Terminal Panel** (Figure 8) shown below is located on the right-hand side (left from control panel) of the generator. Lift up on the cover to gain access to receptacles and terminal lugs.



Terminal legs “O” and “Ground” are considered **bonded grounds**.

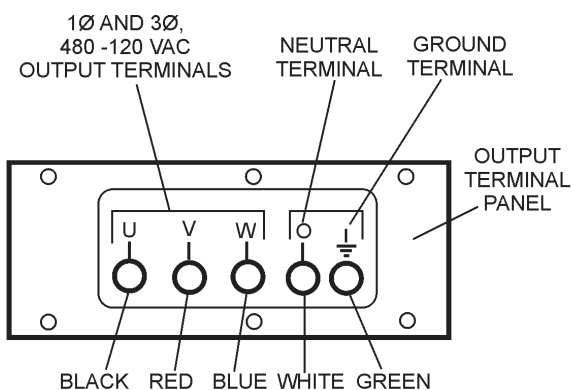
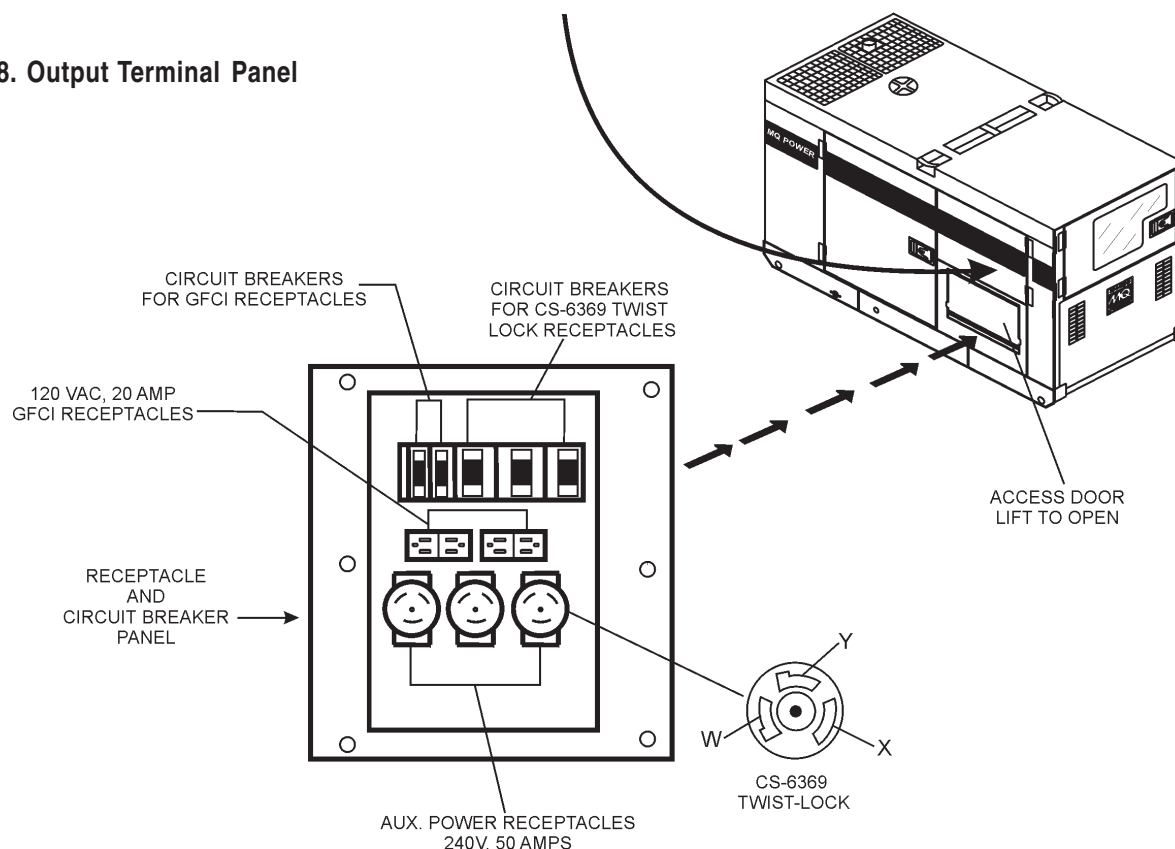


Figure 8. Output Terminal Panel



DCA-125SSJU SERIES — OUTPUT TERMINAL PANEL FAMILIARIZATION

120 VAC GFCI Receptacles

There are two 120 VAC, 20 amp GFCI (Duplex Nema 5-20R) receptacles provided on the output terminal panel. These receptacles can be accessed in **any voltage selector switch** position. Each receptacle is protected by a 20 amp circuit breaker. These breakers are located directly above the GFCI receptacles. Remember the load output (current) of both GFCI receptacles is dependent on the load requirements of the UVWO terminals.

Pressing the **reset** button resets the GFCI receptacle after being tripped. Pressing the "**Test Button**" (See Figure 9) in the center of the receptacle will check the GFCI function. Both receptacles should be tested at least once a month.

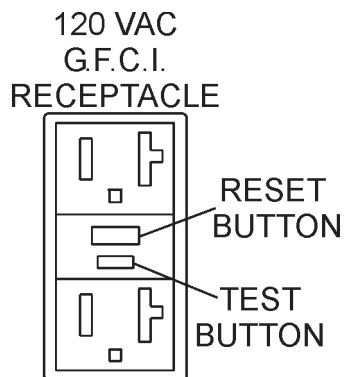


Figure 9. G.F.C.I. Receptacle

Twist Lock Dual Voltage 120/240 VAC Receptacles

There are three 240 VAC, 50 amp auxiliary twist-lock (CS-6369) receptacles (Figure 10) provided on the output terminal panel. These receptacles can **only** be accessed when the voltage selector switch is placed in the **single-phase 240/120 position**.

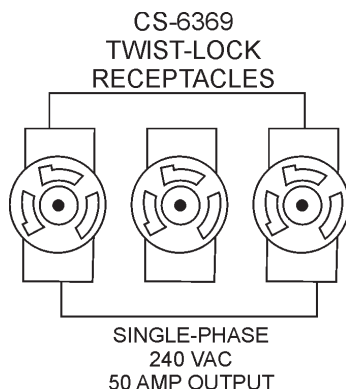


Figure 10. 240 VAC Twist-Lock Auxiliary Receptacles

Each auxiliary receptacle is protected by a 50 amp circuit breaker. These breakers are located directly above the GFCI receptacles. Remember the load output (current) on all three receptacles is dependent on the load requirements of the UVWO terminals.

Turn the **voltage regulator control knob** (Figure 11) on the control panel to obtain the desired voltage. Turning the knob clockwise will **increase** the voltage, turning the knob counter-clockwise will **decrease** the voltage.



Figure 11. Voltage Regulator Control Knob

Removing the Plastic Face Plate (UVWO Terminals)

The UVWO terminal lugs are protected by a plastic face plate cover (Figure 12). Un-lock the locking latch, and lift the terminal cover to gain access to the plastic face plate. Remove the screws securing the face plate to the terminal enclosure, then lift the plastic hinged face plate.

After the load wires have been securely attached to the UVWO terminals, reinstall the plastic face plate. Place the terminal cover in the down position and secure the locking latch.

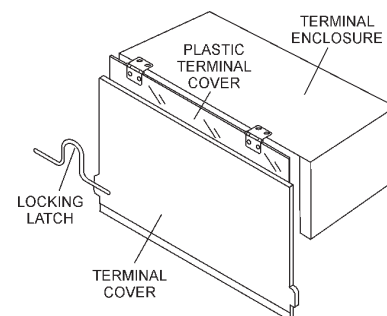


Figure 12. Plastic Face Plate (UVWO Terminals)

DCA-125SSJU SERIES — OUTPUT TERMINAL PANEL FAMILIARIZATION

Connecting Loads

Loads can be connected to the generator by the **UVWO** terminal lugs or the convenience receptacles. (See Figure 13). Make sure to read the operation manual before attempting to connect a load to the generator.

To protect the UVWO output terminals from overload, a 3-pole, 300 amp, **main** circuit breaker is provided. Make sure to switch **ALL** circuit breakers to the "OFF" position prior to starting the engine.

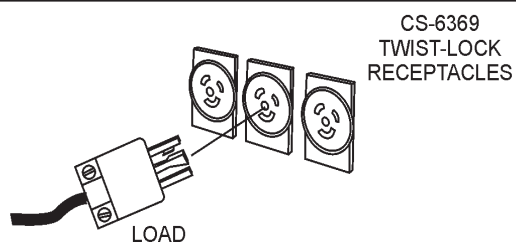
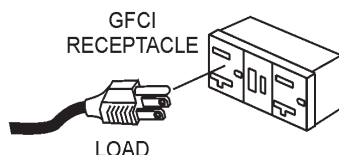
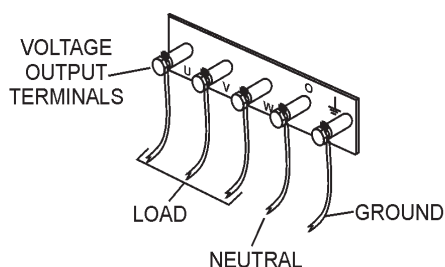


Figure 13. Connecting Loads

Over Current Relay

An **over current relay** (Figure 14) is connected to the main circuit breaker. In the event of an overload, both the circuit breaker and the over current relay may trip. If the circuit breaker can not be reset, the **reset button** on the over current relay must be pressed. The over current relay is located in the control box.

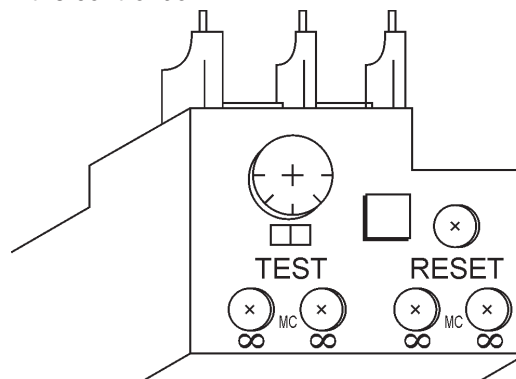


Figure 14. Over Current Relay

Maximum Output

The entire load connected to the UVWO terminal lugs, duplex and auxiliary receptacles must not exceed 110 kw in standby or 100 kw in prime output.

DCA-125SSJU SERIES — LOAD APPLICATION

Single Phase Load

Always be sure to check the nameplate on the generator and equipment to insure the wattage, amperage and frequency requirements are satisfactorily supplied by the generator for operating the equipment.

Generally, the wattage listed on the nameplate of the equipment is its rated output. Equipment may require 130—150% more wattage than the rating on the nameplate, as the wattage is influenced by the efficiency, power factor and starting system of the equipment.



If wattage is not given on the equipment's name plate, approximate wattage may be determined by multiplying nameplate voltage by the nameplate amperage.

$$\text{WATTS} = \text{VOLTAGE} \times \text{AMPERAGE}$$

The power factor of this generator is 0.8. See Table 4 below when connecting loads.

Table 4. Power Factor by Load

Type of Load	Power Factor
Single-phase induction motors	0.4 - 0.75
Electric heaters, incandescent lamps	1.0
Fluorescent lamps, mercury lamps	0.4 - 0.9
Electronic devices, communication equipment	1.0

Table 5. Cable Selection (60 Hz, Single Phase Operation)

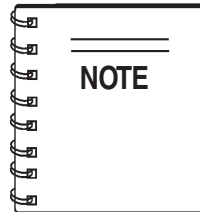
Current in Amperes	Load In Watts		Maximum Allowable Cable Length			
	At 120 Volts	At 240 Volts	#10 Wire	#12 Wire	#14 Wire	#16 Wire
2.5	300	600	1000 ft.	600 ft.	375 ft.	250 ft.
5	600	1200	500 ft.	300 ft.	200 ft.	125 ft.
7.5	900	1800	350 ft.	200 ft.	125 ft.	100 ft.
10	1200	2400	250 ft.	150 ft.	100 ft.	
15	1800	3600	150 ft.	100 ft.	65 ft.	
20	2400	4800	125 ft.	75 ft.	50 ft.	

CAUTION: Equipment damage can result from low voltage.

Three Phase Load

When calculating the power requirements for 3-phase power use the following equation:

$$\text{KVA} = \frac{\text{VOLTAGE} \times \text{AMPERAGE} \times 1.732}{1000}$$



Motors and motor-driven equipment draw much greater current for starting than during operation.

An inadequate size connecting cable which cannot carry the required load can cause a voltage drop which can burn out the appliance or tool and overheat the cable. See Table 5.

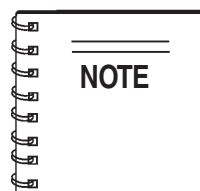
- When connecting a resistance load such as an incandescent lamp or electric heater, a capacity of up to the generating set's rated output (kW) can be used.
- When connecting a fluorescent or mercury lamp, a capacity of up to the generating set's rated output (kW) multiplied by 0.6 can be used.
- When connecting an electric drill or other power tools, pay close attention to the required starting current capacity.

When connecting ordinary power tools, a capacity of up to the generating set's rated output (kW) multiplied by 0.8 can be used.

CAUTION:



Before connecting this generator to any building's electrical system, a **licensed electrician** must install an **isolation (transfer) switch**. Serious injury or death may result without this transfer switch.



If 3Ø load (kVA) is not given on the equipment nameplate, approximate 3Ø load output may be determined by multiplying voltage by amperage by 1.732.

DCA-125SSJU SERIES — GENERATOR OUTPUTS

Generator Output Voltages

A wide range of voltages are available to supply voltage for many different applications. Voltages are selected by using the **voltage selector** switch (Figure 15). To obtain some of the voltages as listed in Table 6 (see below) will require a fine adjustment using the **voltage regulator (VR) control knob** located on the control panel.

Voltage Selector Switch

The **voltage selector** switch (Figure 15) is located above the UVWO Hard Wire Hook-up Panel. It has been provided for ease of voltage selection.

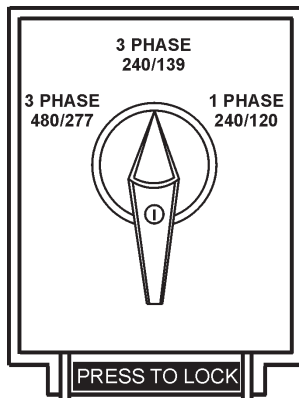


Figure 15. Voltage Selector Switch

Voltage Selector Switch Locking Button

The voltage selector switch has a locking button to protect the generator and load from being switched while the engine is running. To lock the voltage selector switch, **press** and **hold** the **red button** located at the bottom of the switch.

CAUTION:



NEVER change the position of the **voltage selector switch** while the engine is running. **ALWAYS** place circuit breaker in the open position before selecting voltage.

Generator Amperage

Tables 7 and 8 describe the generator's current output capability for both 1Ø-phase and 3Ø phase applications.

Table 7. Generator Ampere Ratings — 1Ø

kW	240V	120V
20	83	166
25	104	208
30	225	250
35	145	291
40	166	333
45	187	375
50	208	417
60 (Max)	250	500

Table 8. Generator Ampere Ratings — 3Ø

kW	208V	240V	480V
20	59	60	30
25	87	75	38
30	104	90	45
35	121	105	53
40	139	120	60
45	156	136	68
50	174	152	76
60	208	181	99

Table 6. Voltages Available

Three Phase (Switchable)	208 VOLT	220 VOLT	240 VOLT	416 VOLT	440 VOLT	480 VOLT
Single Phase (Switchable)	120 VOLT	127 VOLT	139 VOLT	240 VOLT	254 VOLT	277 VOLT

DCA-125SSJU SERIES — GENERATOR OUTPUTS/GAUGE READING

GFCI Receptacle Load Capability

The load capability of the GFCI receptacles is directly related to the voltage being supplied at either the UVWO terminals or the 3 twist lock auxilliary receptacles.

Tables 9 and 10 show what amount of current is available at the GFCI receptacles when the UVWO terminals and twist lock receptacles are in use. Be careful that your load does not to exceed the available current capability at the receptacles.

Table 9. GFCI Receptacle Load Capability

KVA in Use (UVWO Terminals)	Available Load Current (AMPS)
3Ø 240/480V	GFCI Duplex NEMA 5-20R 120V
82	0
77.8	5 amps per receptacle
73.7	10 amps per receptacle
69.5	15 amps per receptacle
65.4	20 amps per receptacle

Table 10. GFCI Receptacle Load Capability

KW in Use Twist-Lock (CS6369)	Available Load Current (AMPS)
1Ø 240/120V	GFCI Duplex NEMA 5-20R 120V
60	0
58.8	5 amps per receptacle
57.6	10 amps per receptacle
56.4	15 amps per receptacle
55.2	20 amps per receptacle

How to Read the Output Terminal Gauge.

The gauge and selector switch on the control panel **DO NOT** effect the generator output. They are provided to help observe how much power is being supplied, produced at the UVWO terminals lugs.

When the Voltage selector switch is in the 3Ø,240/139V position (See Figure 16), place the **AC Voltmeter Change-Over Switch** (Figure 17) to the W-U position and the **AC Ammeter Change-Over Switch** (Figure 19) to the U or W position to read the output on the selected leg.

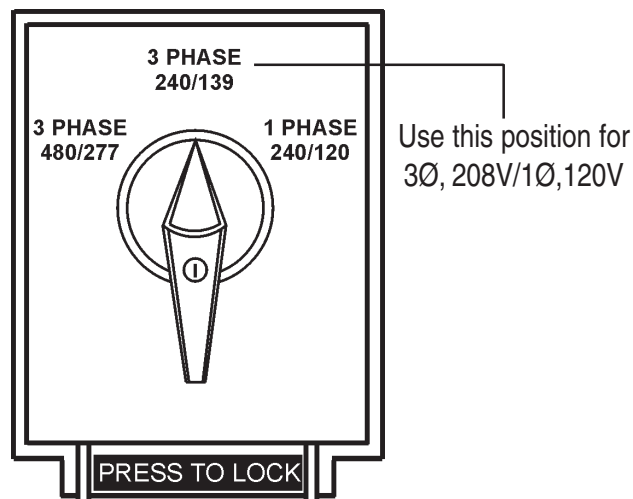


Figure 16. Voltage Selector Switch 240/139V Three Phase Position (for 3Ø, 208V, 120V voltage)

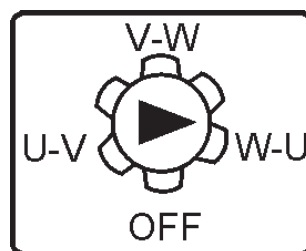


Figure 17. AC Voltmeter Change-Over Switch

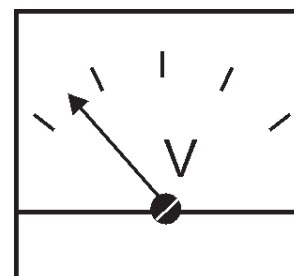


Figure 18 AC Voltmeter Gauge (Volt reading on W-U Lug)

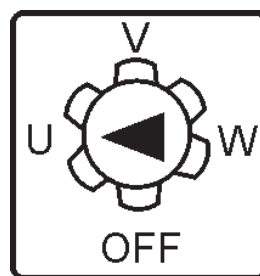


Figure 19. AC Ammeter Change-Over Switch

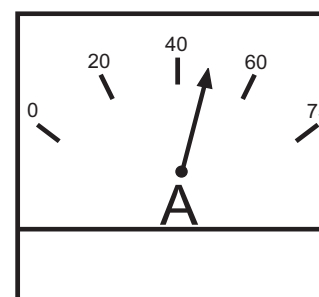
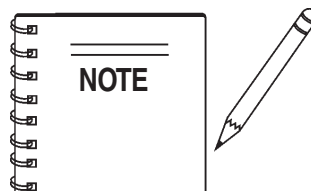


Figure 20. AC Ammeter (Amp reading on U lug)



The **ammeter** and **voltmeter** gauges are only active when the UVWO terminals are in use.

DCA-125SSJU SERIES — OUTPUT TERMINAL PANEL CONNECTIONS

UVWO Terminal Output Voltages

Various output voltages can be obtained using the UVWO output terminal lugs. The voltages at the terminals are dependent on the position of the **Voltage Selector Switch** and the adjustment of the **Voltage Regulator Control Knob**.

Remember the voltage selector switch determines the **range** of the output voltage. The voltage regulator (VR) allows the user to increase or decrease the selected voltage.

3Ø 240/139 UVWO Terminal Output Voltages

1. Place the voltage selector switch in the 3Ø 240/139 position as shown in Figure 21.

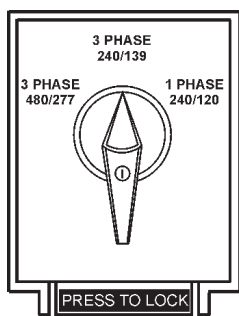


Figure 21. Voltage Selector Switch 240/139V Three-Phase Position

2. Connect the load wires to the UVWO terminals as shown in Figure 22.

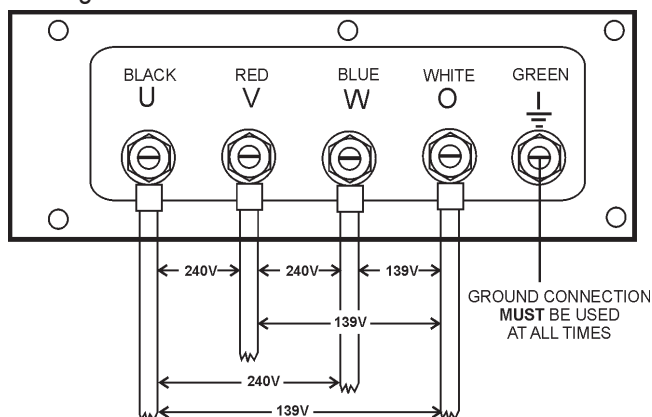


Figure 22. UVWO Terminal Lugs 240/139V Three Phase Connections

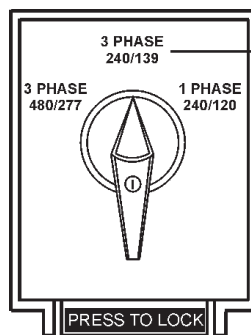
3. Turn the voltage regulator knob (Figure 23) clockwise to increase voltage output, turn counterclockwise to decrease voltage output.



Figure 23. Voltage Regulator Knob (139V/240V)

3Ø 208V/1Ø120V UVWO Terminal Output Voltages

1. Place the voltage selector switch in the 3Ø 240/139 position as shown in Figure 24.



Use this position for 3Ø-208 or 1Ø120V.

Figure 24. Voltage Selector Switch 3Ø-208V/1Ø-120V Three-Phase Position

2. Connect the load wires to the UVWO terminals as shown in Figure 25.

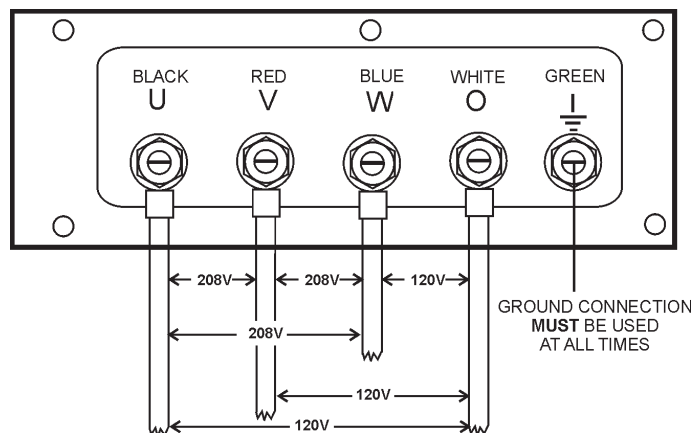
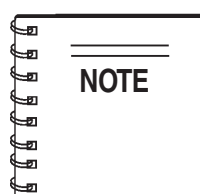


Figure 25. UVWO Terminal Lugs 3Ø-208V/120V Connections

3. Turn the voltage regulator knob (Figure 26) clockwise to increase voltage output, turn counterclockwise to decrease voltage output.



Figure 26. Voltage Regulator Knob (208V)



To achieve a 3Ø 208V output the voltage selector switch must be in the 3Ø-240/139 position and the voltage regulator must be adjusted to 208V.

DCA-125SSJU SERIES — OUTPUT TERMINAL PANEL CONNECTIONS

3Ø 480/277 UVWO Terminal Output Voltages

1. Place the voltage selector switch in the 3Ø 480/277 position as shown in Figure 27.

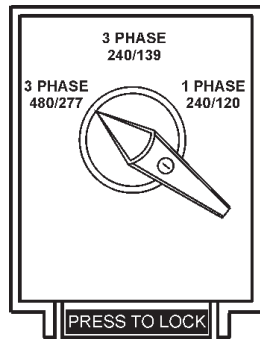


Figure 27. Voltage Selector Switch 480/277V Three-Phase Position

2. Connect the load wires to the UVWO terminals as shown in Figure 28.

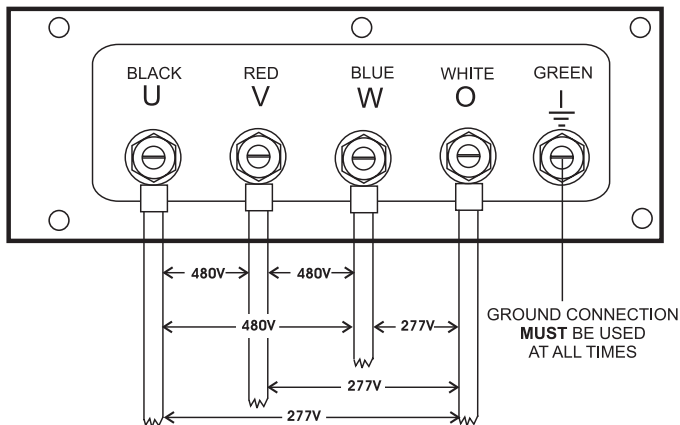


Figure 28. UVWO Terminal Lugs 240/139V Three Phase Connections

3. Turn the voltage regulator knob (Figure 29) clockwise to increase voltage output, turn counterclockwise to decrease voltage output.



Figure 29. Voltage Regulator Knob (139V/240V)

1Ø 240V/120V UVWO Terminal Output Voltages

1. Place the voltage selector switch in the 1Ø 240/120 position as shown in Figure 30.

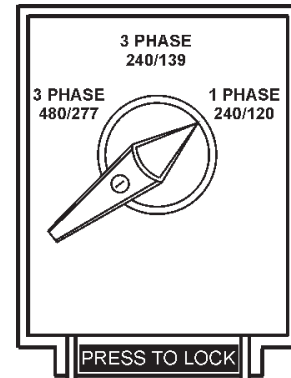


Figure 30. Voltage Selector Switch 240/120V Single-Phase Position

2. Connect the load wires to the UVWO terminals as shown in Figure 31.

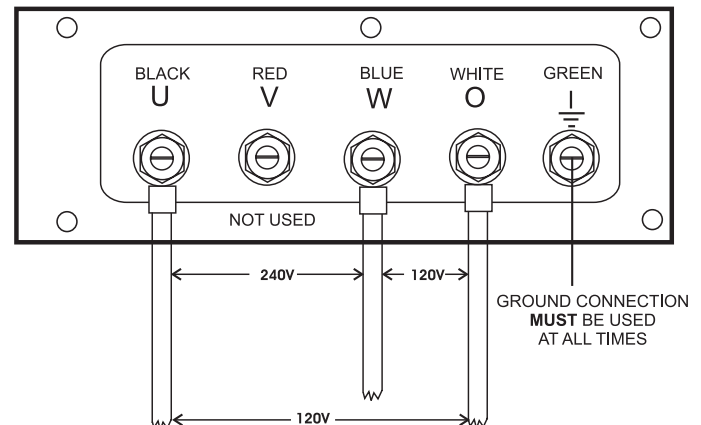


Figure 31. UVWO Terminal Lugs 1Ø-240V/120V Connections

3. Turn the voltage regulator knob (Figure 32) clockwise to increase voltage output, turn counterclockwise to decrease voltage output.



Figure 32. Voltage Regulator Knob (1Ø-240/120V)

Circuit Breakers

To protect the generator from an overload, a 3-pole, 300 amp, **main** circuit breaker is provided to protect the UVW output terminals from overload. In addition two single-pole, 20 amp **GFCI** circuit breakers are provided to protect the GFCI receptacles from overload. Three 50 amp **load** circuit breakers have also been provided to protect the auxiliary receptacles from overload. Make sure to switch **ALL** circuit breakers to the "OFF" position prior to starting the engine.

Lubrication Oil

Fill the engine crankcase with lubricating oil through the filler hole, but **DO NOT** overfill. Make sure the generator is level. and verify that the oil level is maintained between the two notches (Figure 33) on the dipstick. See Table 11 for proper selection of engine oil.

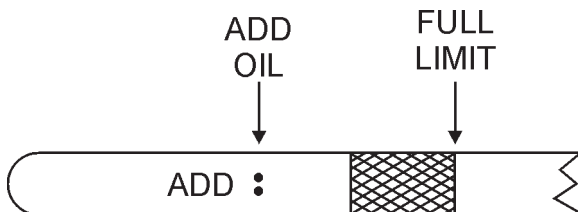


Figure 33. Engine Oil Dipstick

When checking the engine oil, be sure to check if the oil is clean. If the oil is not clean, drain the oil by removing the oil drain plug, and refill with the specified amount of oil as outlined in the **Volvo Engine Owner's Manual**. Oil should be warm before draining.

Other types of motor oils may be substituted if they meet the following requirements:

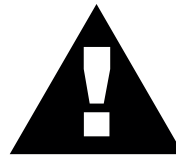
- API Service Classification CH-4
- API Service Classification CG-4
- API Service Classification CF-4
- ACEA Specification E3
- ACEA Specification E2

Table 11. Recommended Motor Oil

Temperature Range	Type Oil
104° F ~ 23° F (40° C ~ -5°C)	SAE 15W-40
23° F ~ 5° F (-5° C ~ -15°C)	SAE 5W-30
Below 5° C (-15°)	SAE 30 OR SAE 0W-30

Fuel Check

DANGER:



Fuel spillage on a **hot!** engine can cause a **fire** or **explosion**. If fuel spillage occurs, wipe up the spilled fuel completely to prevent fire hazards. **NEVER!** smoke around or near the generator.



Refilling the Fuel System

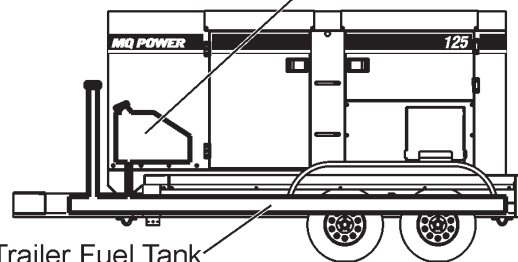
The DCA150SSVU genset may (if equipped with a trailer or skid) have a **double fuel tank system** (Figure 34), which consists of an **internal** generator fuel tank, and a **trailer mounted** fuel tank. It is also possible the genset can be equipped with a **skid mounted** fuel tank (Figure 35). The skid type fuel system does not use the internal generator fuel tank.

Use the instructions in this section that applies to your type of fuel tank system.

ALWAYS fill the fuel tank with clean and fresh **#2 diesel fuel**. **DO NOT** fill the fuel tanks beyond their capacities.

Pay attention to the fuel tank capacity when replenishing fuel. The fuel tank cap must be closed tightly after filling. Handle fuel in a safety container. If the container does not have a spout, use a funnel. Wipe up any spilled fuel immediately.

Generator Internal Fuel Tank



Trailer Fuel Tank

Figure 34. Double Fuel Tank System

WARNING:



ONLY properly trained personnel who have read and understand this section should refill the double fuel tank system. Use **#2 diesel fuel**.

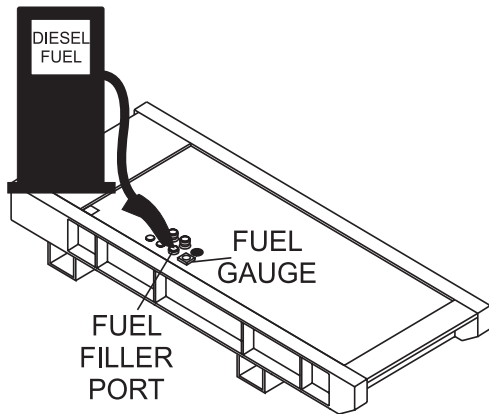


Figure 35. Skid Type Fuel Tank System

Refueling Procedure:

DANGER:



Diesel fuel and its vapors are dangerous to your health and the surrounding environment. Avoid skin contact and/or inhaling fumes.



1. **Level Tanks** – make sure fuel cells are level with the ground. Failure to do so will cause fuel to spill from the tank before reaching full capacity. See Figure 36.

WARNING:



ALWAYS! place trailer on firm level ground before refueling.

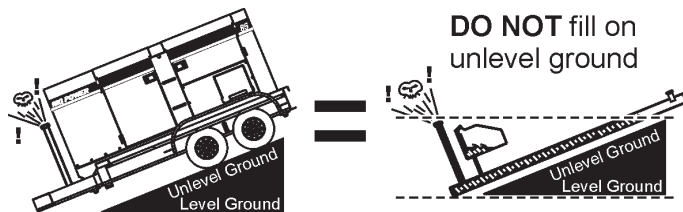


Figure 36. Only Fill on Level Ground

2. **Trailer Fuel Tank First** – The trailer fuel tank is the primary fuel tank and holds a larger capacity of fuel. The fuel in the trailer will be filtered and sent to the engine. **ALWAYS** fill trailer fuel tank (Figure 37) first.

CAUTION:



ALWAYS! fill trailer tank **first** with **#2 diesel fuel**, before filling secondary internal tank.

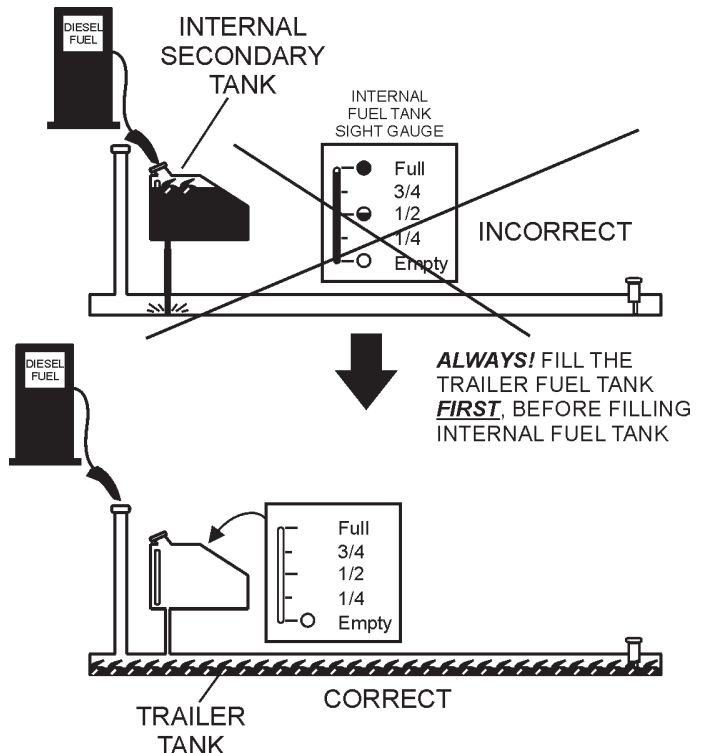
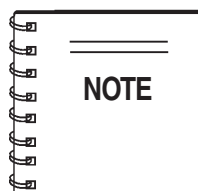
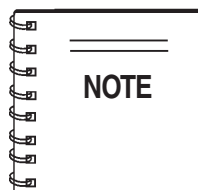


Figure 37. Fuel Tank Filling Order



ONLY! use **#2 diesel fuel** when refueling.



Fuel from the secondary inner tank will eventually drain into the primary trailer tank.

3. **NEVER overfill trailer fuel tank** – It is important to read the trailer fuel gauge when filling trailer fuel tank. **DO NOT** wait for fuel to rise in filler neck. See Figure 38.

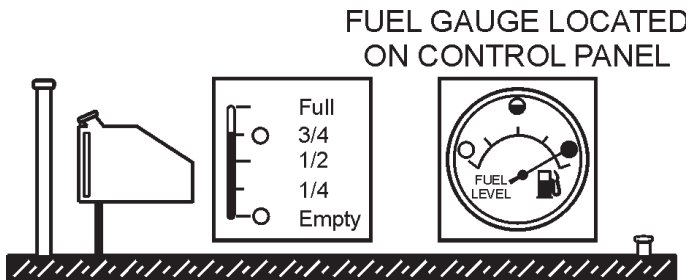


Figure 38. Full Trailer Tank

5. Figure 40 below reflects a full fuel system.

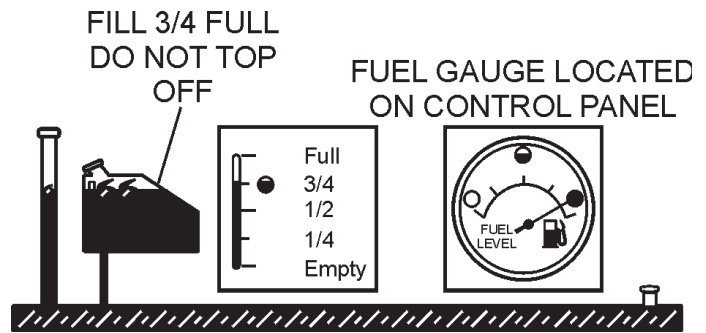


Figure 40. Full Fuel System

WARNING:



DO NOT OVER-FILL fuel system. Leave room for fuel expansion . Fuel expands when heated.

4. Once the trailer tank is full, the **secondary inner tank** can be filled (See Figure 39). Notice how the trailer filler tube level rises when the internal tank is filled.

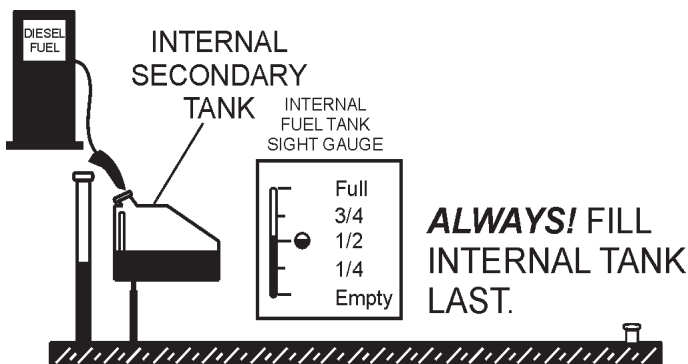


Figure 39. Filling Secondary Internal Fuel Tank

WARNING:



It is recommended to only fill the internal secondary tank to 3/4 full in order to allow for fuel return, fuel expansion, and to avoid spillage. See Figure 41 for fuel expansion.

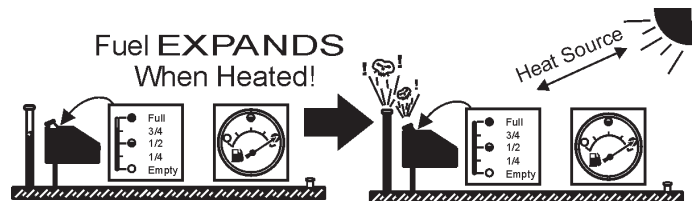


Figure 41. Fuel Expansion

Coolant (Ethylene Glycol [Green] / Water — 50/50 mix)

Use only drinkable tap water. If hard water or water with many impurities is used, the inside of the engine and radiator may become coated with deposits and cooling efficiency will be reduced.

An anticorrosion additive added to the water will help prevent deposits and corrosion in the cooling system. See the engine manual for further details.

CAUTION:



If adding coolant/antifreeze mix to the radiator, **DO NOT** remove the radiator cap until the unit has completely cooled. The possibility of **hot!** coolant exists which can cause severe burns.



Day-to-day addition of coolant is done from the recovery tank. When adding coolant to the radiator, **DO NOT** remove the radiator cap until the unit has completely cooled. See Table 12 for engine, radiator, and recovery tank coolant capacities. Make sure the coolant level in the recovery tank is always between the "H" and the "L" markings.

Table 12. Coolant Capacity

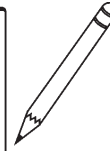
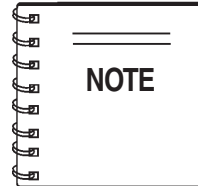
Engine and Radiator	6.1 Gal. (23 Liters)
Reserve Tank	2 Quarts (1.9 Liters)

Operation Freezing Weather

When operating in freezing weather, be certain the proper amount of antifreeze (Table 13) has been added.

Table 13. Anti-Freeze Operating Temperatures

Vol % Anti-Freeze	Freezing Point		Boiling Point	
	°C	°F	°C	°F
40	-24	-12	106	222
50	-37	-34	108	226



When the antifreeze is mixed with water, the antifreeze mixing ratio **must be** less than 50%.

Cleaning the Radiator

The engine may overheat if the radiator fins become overloaded with dust or debris. Periodically clean the radiator fins with compressed air. Cleaning inside the machine is dangerous, so clean only with the engine turned off and the **negative** battery terminal disconnected.

Air Cleaner

Periodic cleaning/replacement is necessary. Inspect it in accordance with the **John Deere Engine Owner's Manual**.

Fan Belt Tension

A slack fan belt may contribute to overheating, or to insufficient charging of the battery. Inspect the fan belt for damage and wear and adjust it in accordance with the **John Deere Engine Owner's Manual**.

The fan belt tension is proper if the fan belt bends 10 to 15 mm (Figure 42) when depressed with the thumb as shown below.

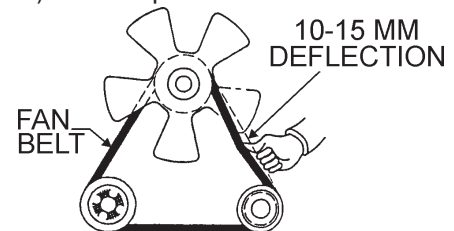


Figure 42. Fan Belt Tension



NEVER! place hands near the belts or fan while the generator set is running.



Battery

This unit is of negative ground **DO NOT** connect in reverse. Always maintain battery fluid level between the specified marks. Battery life will be shortened, if the fluid level are not properly maintained. Add only distilled water when replenishment is necessary.

DO NOT over fill. Check to see whether the battery cables are loose. Poor contact may result in poor starting or malfunctions. **Always** keep the terminals firmly tightened. Coating the terminals with an approved battery terminal treatment compound. Replace battery with only recommended type battery. The battery type used in this generator is BCI Group 27.

The battery is sufficiently charged if the specific gravity of the battery fluid is 1.28 (at 68° F). If the specific gravity should fall to 1.245 or lower, it indicates that the battery is dead and needs to be recharged or replaced.

Battery Cable Installation

ALWAYS be sure the battery cables (Figure 43) are properly connected to the battery terminals as shown below. The **RED** cable is connected to the positive terminal of the battery, and the **BLACK** cable is connected to the negative terminal of the battery.

CAUTION:



ALWAYS disconnect the negative terminal **FIRST** and reconnect negative terminal **LAST**.

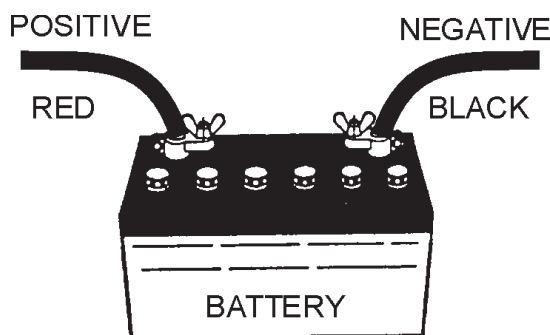
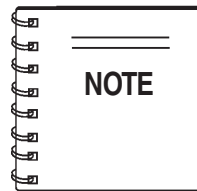


Figure 43. Battery Connections

When connecting battery do the following:

1. **NEVER** connect the battery cables to the battery terminals when the **ignition** switch is in either the **Pre-Heat, RUN, or START** position. **ALWAYS** make sure that the ignition switch is in the **STOP** position when connecting the battery.
2. Place a small amount of battery terminal treatment compound around both battery terminals. This will ensure a good connection and will help prevent corrosion around the battery terminals.



If the battery cable is connected incorrectly, electrical damage to the generator will occur. Pay close attention to the polarity of the battery when connecting the battery.

CAUTION:



Inadequate battery connections may cause poor starting of the generator, and create other malfunctions.

Alternator

The polarity of the alternator is negative grounding type. When an inverted circuit connection takes place, the circuit will be in short circuit instantaneously resulting the alternator failure.

DO NOT put water directly on the alternator. Entry of water into the alternator leads an electrolyte corrosion causing an alternator failure.

Before charging the battery with an external electric source, be sure to disconnect the battery cables.

Wiring

Inspect the entire generator for bad or worn electrical wiring or connections. If any wiring or connections are exposed (insulation missing) replace wiring immediately.

Piping and Hose Connection

Inspect all piping, oil hose, and fuel hose connections for wear and tightness. Tighten all hose clamps and check hoses for leaks.

If any hose (**fuel** or **oil**) lines are defective replace them immediately.

DCA-125SSJU SERIES — GENERATOR START-UP PROCEDURE (MANUAL)

WARNING:



The engine's exhaust contains harmful emissions. **ALWAYS have adequate ventilation when operating.** Direct exhaust away from nearby personnel.

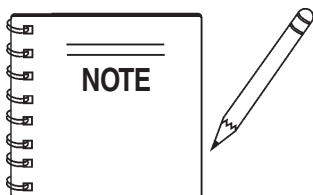
Before Starting

Engine Operating Panel S/N 73002140 and below

CAUTION:



NEVER! manually start the engine with the **main, GFCI** or **auxiliary** circuit breakers in the **ON** (closed) position.



Steps 1 thru 19 are referenced for Engine Operating Panels up to **S/N 7500705** (Figure 44). This unit has a ignition key switch and a throttle lever. It does not have an MPEC unit.

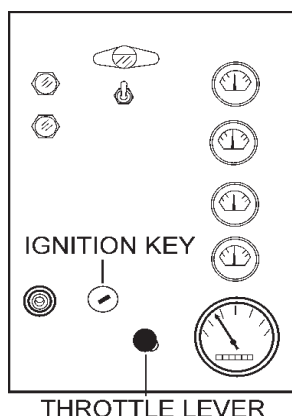


Figure 44. Engine Operating Panel Up to S/N 7500507

1. Place the **main, G.F.C.I.** and **aux.** circuit breakers (Figure 45) in the **"OFF"** position prior to starting the engine.

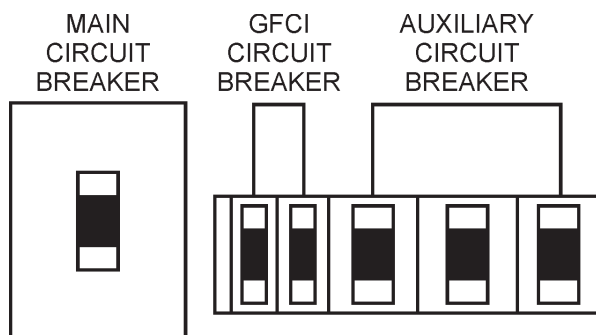


Figure 45. Main, Aux. and GFCI Circuit Breakers (OFF)

2. Connect the load to the **UVWO** terminals or **auxiliary receptacles** as shown in Figure 46. These load connection points can be found on the output terminal panel. To gain access to the UVWO terminals or other power receptacles, unlock the access cover and lift the door.
3. The UVWO terminals are protected by a plastic cover, remove this cover to gain access to the terminals. Tighten terminal nuts securely to prevent load wires from slipping out.

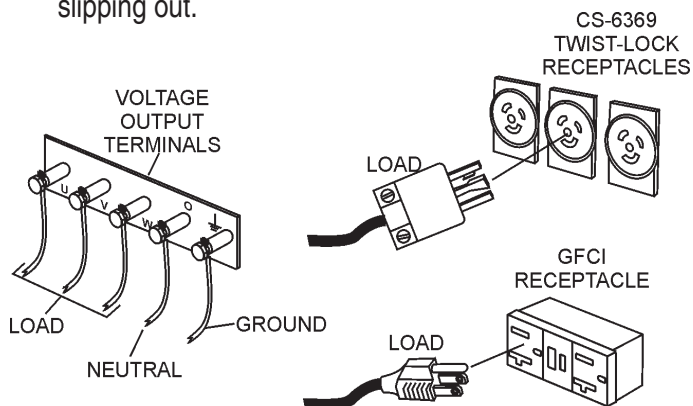


Figure 46. Load Connections

4. Close all engine enclosure doors (Figure 47).

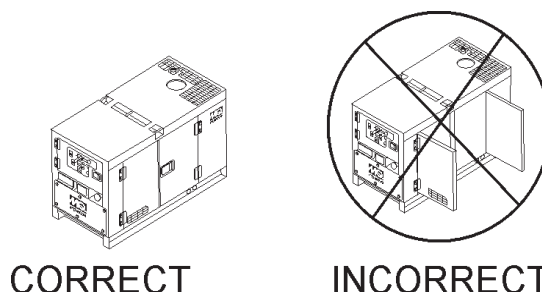


Figure 47. Engine Enclosure Doors

5. When starting the generator in **COLD** weather conditions, turn the **ignition key** to the **"PREHEAT"** position (Figure 48). In warm weather conditions, pre-heating is not necessary. Skip to step 7.

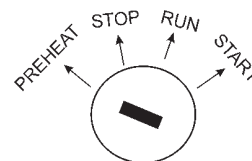


Figure 48. Engine Ignition Switch (Pre-Heat)

DCA-125SSJU SERIES — GENERATOR START-UP PROCEDURE (MANUAL)

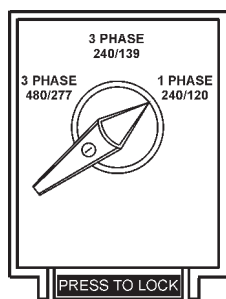
6. Press and hold the engine cold starting button (Figure 49) until the button illuminates (**ON**).
11. The generator's frequency meter (Figure 54) should be displaying the 60 cycle output frequency in **HERTZ**.



Figure 49. Cold Starting Button

7. Place the voltage selector switch in the desired voltage position (Figure 50).

Figure 50. Voltage Selector Switch



STARTING (MANUAL)

Engine Operating Panel up to S/N 7500507

8. Place the **engine throttle control** in the "**LOW**" position (Figure 51).

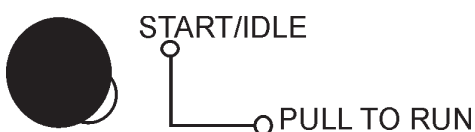


Figure 51. Engine Throttle Control

9. Turn the ignition key to the "**START**" position (Figure 52) and listen for the engine to begin cranking. After the engine starts release the ignition key.

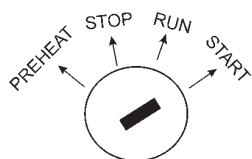


Figure 52. Engine Ignition Switch (Start)

10. Once the engine has started, let it run for 3-5 minutes, then turn the throttle handle control (Figure 53) to the "**HIGH**" position.

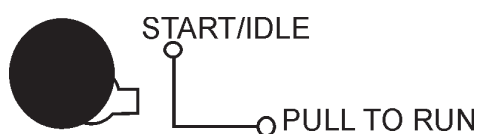


Figure 53. Engine Throttle Control

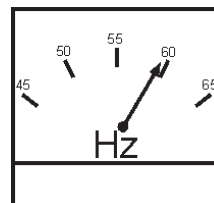


Figure 54. Frequency Meter (Hz)

12. The generator's AC-voltmeter (Figure 55) will display the generator's output in **VOLTS**. If the voltage is not within the specified tolerance, use the voltage adjustment control knob (Figure 56) to increase or decrease the desired voltage.

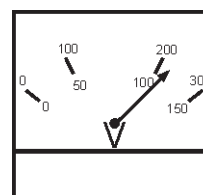


Figure 55. Voltmeter



Figure 56. Voltage Adjust Control Knob

13. The ammeter (Figure 57) will indicate zero amps with no load applied. When a load is applied, the ammeter will indicate the amount of current that the load is drawing from the generator.

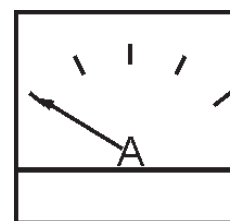


Figure 57. Ammeter (No Load)

14. The engine oil pressure gauge (Figure 58) will indicate the oil pressure (kg/ cm²) of the engine. Under normal operating conditions the oil pressure is approximately

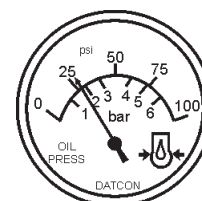


Figure 58. Oil Pressure Gauge

DCA-125SSJU SERIES — GENERATOR START-UP PROCEDURE (MANUAL)

15. The **coolant temperature gauge** (Figure 59) will indicate the coolant temperature. Under normal operating conditions the coolant temperature should be between 165 and 215 degrees Fahrenheit (**Green Zone**).

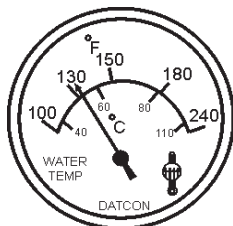


Figure 59. Coolant Temperature Gauge

16. The **tachometer gauge** (Figure 60) will indicate the speed of the engine when the generator is operating. Under normal operating conditions this speed is approximately 1800 RPM's.

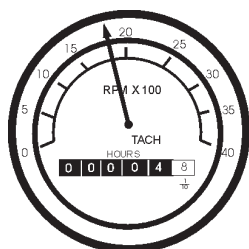


Figure 60. Engine Tachometer Gauge

17. Place the **main**, **GFCI**, and **aux.** circuit breakers in the "ON" position (Figure 61).

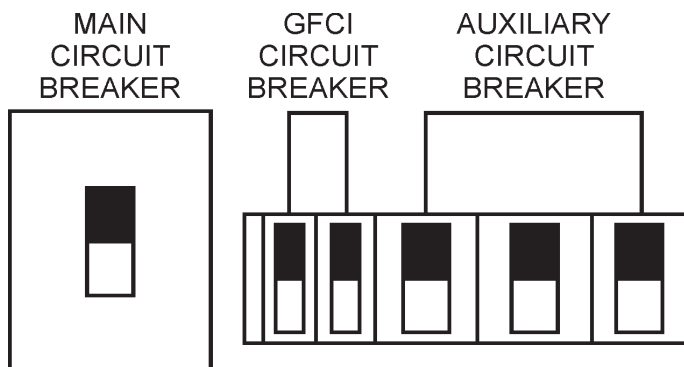


Figure 61. Main, Aux. and GFCI Circuit Breakers (ON)

18. Observe the generator's ammeter (Figure 62) and verify it reads the anticipated amount of current with respect to the load. The ammeter will only display a current reading if a load is in use.

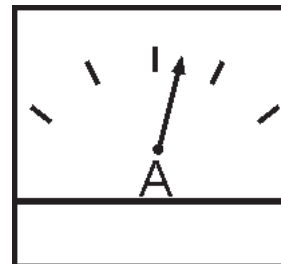


Figure 62. Ammeter (Load)

19. The generator will run until manually stopped or an abnormal condition occurs.

DCA-125SSJU SERIES — GENERATOR START-UP PROCEDURE (MANUAL)

WARNING:



The engine's exhaust contains harmful emissions. **ALWAYS have adequate ventilation when operating.** Direct exhaust away from nearby personnel.

Before Starting

Engine Operating Panel S/N 7500508~

CAUTION:



NEVER! manually start the engine with the **main, GFCI** or **auxiliary** circuit breakers in the **ON** (closed) position.

Steps 20 thru 31 are referenced for Engine Operating Panel S/N 7500508~ (Figure 63). This unit does **not** have a key ignition switch or a throttle lever. It does have an “**engine speed switch**” that is used in conjunction with the MPEC unit.

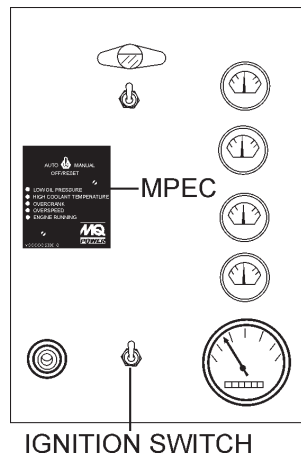
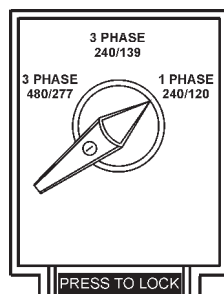


Figure 63. Engine Operating Panel S/N 7500508~

20. Perform steps 1 through 4 in the **Before Starting** section (page 41-42) as outlined in the **Manual Generator Start-up Procedure** (Engine Operating Panel up to S/N 73002140).
21. In cold weather conditions, perform step 6 in the **Before Starting** section (page 42) as outlined in the **Manual Generator Start-up Procedure** (Engine Operating Panel up to S/N 7500508). Otherwise skip to step 22.

22. Place the voltage selector switch in the desired voltage position (Figure 64).

Figure 64. Voltage Selector Switch



23. Set engine speed switch to “**LOW**” (Figure 65).

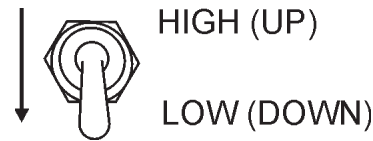


Figure 65. Engine Speed Switch (Low)

24. Place the Auto-Off/Reset-Manual switch in the “**MANUAL**” position to start the engine (Figure 66). Once the engine starts, let the engine run for 1-2 minutes. Listen for any abnormal noises.



Figure 66. Auto-Off/Reset-Manual Switch

25. Once the engine is warm and the engine is running properly, set the engine speed switch to “**HIGH**” (Figure 67).

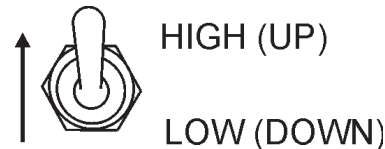


Figure 67. Engine Speed Switch (High)

26. Verify that the “**Engine Running**” status LED on the MPEC unit (Figure 68) is “**ON**” (lit) after the engine has been started.



Figure 68. Engine Running LED (ON)

27. Continue operating the generator as outlined in steps 11 thru 19 (pages 42-43).

DCA-125SSJU SERIES — GENERATOR START-UP PROCEDURE (AUTO MODE)

DANGER:



Before connecting this generator to any building's electrical system, a **licensed electrician** must install an **isolation** (transfer)



switch. Serious **injury** or **death** may result without this transfer switch.

CAUTION:

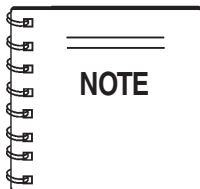


The **Engine Speed Switch** must be set to the **"HIGH"** position when running in the **Auto-Start** mode. Failing to set the switch in the proper position can result in damage to your generator when it turns on.

CAUTION:



When connecting the generator to a isolation (transfer) switch, **ALWAYS** have power applied to the generator's internal battery charger. This will ensure that the engine will not fail due to a dead battery.



When the generator is set in the **"AUTO"** mode, the generator will **automatically start** in the event of commercial power falling below a prescribed level by means of a contact closure that is generated automatically by a transfer switch.

30. Place the Off/Manual/Auto switch (Figure 70) in the **"AUTO"** position .



Figure 70. Off/Manual Auto Switch (AUTO)

31. Continue to follow the steps outlined in the **"Manual Start-up"** procedure (start at step 11, page 42).

WARNING:



When running the generator in the **"AUTO"** mode, remember the generator can start up at any time without warning. **NEVER** attempt to perform any maintenance when the generator is in the auto mode.

28. Perform steps 20 through 22 in the **Before Starting** section (page 44) as outlined in the **Manual Starting Procedure**.

29. Set the engine speed switch (Figure 69) to the **"HIGH"** position.

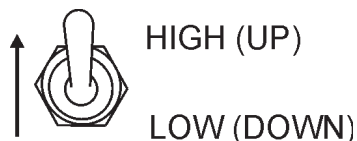


Figure 69. Engine Speed Switch (High)

DCA-125SSJU SERIES — GENERATOR SHUT-DOWN PROCEDURE

Shutdown Procedure - Ignition Switch (Up to S/N 7500507)

To shutdown the generator use the following procedure:

1. Place both the **MAIN**, **GFCI** and **LOAD** circuit breakers as shown in Figure 45 to the "OFF" position.
2. Place the engine throttle control in the "LOW" position (Figure 71).

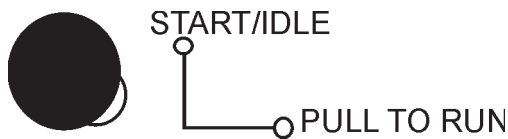


Figure 71. Engine Throttle Control (Low)

3. Let the engine cool by running it for 3-5 minutes with no load applied.
4. Turn the Ignition Key Switch (Figure 72) to the "OFF" position.

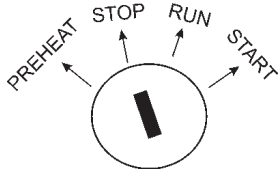


Figure 72. Engine Ignition Switch (Stop)

5. Remove all loads from the generator.

Emergency Shutdown Procedure - Ignition Switch (Up to S/N 7500507)

1. To shut-down the engine in the event of an emergency, switch the **MAIN**, **GFCI** and **LOAD** (Figure 61) circuit breakers to "OFF" position.
2. Turn the ignition switch key to the "STOP" position (Figure 72).

Shutdown Procedure - Engine Controller (S/N 7500508~)

To shutdown the generator use the following procedure:

1. Place both the **MAIN**, **GFCI** and **LOAD** circuit breakers as shown in Figure 45 to the "OFF" position.
2. Place the engine speed switch in the "LOW" position (Figure 73).



Figure 73. Engine Speed Switch (Low)

3. Let the engine cool by running it for 3-5 minutes with no load applied.
4. Place the Auto-Off/Reset-Manual switch (Figure 74) to the **OFF/Reset** position.



Figure 74. Off/Manual Auto Switch (Off)

5. Verify that the **all** status LED on the MPEC display (Figure 68) are "OFF" (not lit).
6. Remove all loads from the generator.

Emergency Shutdown Procedure - Engine Controller (S/N 7500508~)

1. To shut-down the engine in the event of an emergency, switch the **MAIN**, **GFCI** and **LOAD** (Figure 45) circuit breakers to "OFF" position.
2. Place the Auto-Off/Reset-Manual switch (Figure 74) to the "OFF/Reset" position.

CAUTION:



NEVER stop the engine suddenly except in an emergency. **DO NOT** use the emergency stop switch as a method of shutting down the generator. This switch is **ONLY** to be used in the event of an emergency.

TABLE 14. INSPECTION/MAINTENANCE		10 Hrs DAILY	250 Hrs	500 Hrs	1000 Hrs
ENGINE	Check Engine Fluid Levels	X			
	Check Air Cleaner	X			
	Check Battery Acid Level	X			
	Check Fan Belt Condition	X			
	Check for Leaks	X			
	Check for Loosening of Parts	X			
	Replace Engine Oil and Filter *1		X		
	Clean Air Filter		X		
	Drain Bottom of Fuel Tank		X		
	Clean Unit, Inside and Outside		X		
	Change Fuel Filter *2			X	
	Clean Radiator and Check Coolant Protection Level			X	
	Test Fuel Injection Nozzle			X	
	Replace Air Filter Element				X
	Check all Hoses and Clamps				X
	Check Valve Clearance				X
	Check Injection Nozzle			X	X
	Clean Inside of Fuel Tank				X
GENERATOR	Measure Insulation Resistance Over 3M ohms		X		

*1 Replace engine oil and filter at 100 hours, first time only.

*2 Replace fuel filter at 250 Hours, first time only.

General Inspection

Prior to each use, the generator should be cleaned and inspected for deficiencies. Check for loose, missing or damaged nuts, bolts or other fasteners. Also check for fuel, oil, and coolant leaks.

Engine Side (Refer to the Engine Instruction Manual)

Air Cleaner

Every 50 hours: Remove air cleaner element and clean the heavy duty paper element with kerosene, or foam element with liquid detergent and hot water. Wrap foam element in a cloth and squeeze dry. For heavy duty paper element, wipe excess kerosene with towel.

Air Cleaner with Dust Indicator

This indicator is attached to the air cleaner. When the air cleaner element is clogged, air intake restriction becomes greater and the dust indicator signal shows “**RED**” meaning the element needs changing. After changing the air element, press the dust indicator button to reset the indicator.

Service Daily

If the engine is operating in very **dusty** or **dry grass** conditions, a clogged air cleaner will result. This can lead to a loss of power, excessive carbon buildup in the combustion chamber and high fuel consumption. Change air cleaner more **frequently** if these conditions exist.

Fuel Addition

Add diesel fuel (the grade may vary according to season and locations). Always pour through the mesh filter.

Removing Water from the Fuel Tank

After prolonged use, water and other impurities accumulate in the bottom of the tank. Occasionally remove the drain cock and drain the contents. During cold weather, the more empty volume inside the tank, the easier it is for water to condense. This can be reduced by keeping the tank full with diesel fuel.

Air Removal

If air enters the fuel injection system of a diesel engine, starting becomes impossible. After running out of fuel, or after disassembling the fuel system, bleed the system according to the following procedure.

To restart after running out of fuel, turn the switch to the “ON” position for 15-30 seconds. Try again, if needed. This unit is equipped with an automatic air bleeding system.

Cleaning the Fuel Strainer

Clean the fuel strainer if it contains dust or water. Remove dust or water in the strainer cap and wash it in gasoline. Securely fasten the fuel strainer cap so that fuel will not leak. Check the fuel strainer every 200 hours of operation or once a month.

Check Oil Level

Check the crankcase oil level prior to each use, or when the fuel tank is filled. Insufficient oil may cause severe damage to the engine. Make sure the generator is level. The oil level must be between the two notches on the dipstick as shown in Figure 33.

Replacing Oil Filter

- Detach the oil filter by loosening center bolt and remove the element together with the filter body.
- Apply a film of oil to the gasket for the cartridge.
- Install the filter body together with the element and fix them by tightening the center bolt.
- After the oil cartridge has been replaced, the engine oil will drop slightly. Run the engine for a while and check for leaks before adding more oil if needed. Clean excessive oil from engine.

Replacing Fuel Filter

- Replace the fuel filter cartridge with new one every 400 hours or so.
- Loosen the drain plug at the lower top of the fuel filter. Drain the fuel in the fuel body together with the mixed water. **DO NOT** spill the fuel during disassembly.
- Vent any air.

Feed Pump Strainer Cleaning

The strainer is incorporated in the feed pump inlet side joint bolt. Clean the strainer with compressed air and rinse it in the fuel oil.

Flushing Out Radiator and Replacing Coolant

- Open both cocks located at the crankcase side and at the lower part of the radiator and drain coolant. Open the radiator cap while draining. Remove the overflow tank and drain.
- Check hoses for softening and kinks. Check clamps for signs of leakage.
- Flush the radiator by running clean tap water through radiator until signs of rust and dirt are removed. **DO NOT** clean radiator core with any objects, such as a screwdriver.
- Tighten both cocks and replace the overflow tank.
- Replace with coolant (Table 12 for correct mixture).
- Close radiator cap tightly.

CAUTION:



Allow engine to cool when flushing out radiator. Flushing the radiator while **hot!** will damage radiator.

Generator Storage

For long term storage of the generator the following is recommended:

- Fill the fuel tank completely. Treat with a fuel stabilizer if necessary.
- Completely drain the oil from the crankcase and refill if necessary with fresh oil.
- Clean the entire generator, internal and external.
- Cover the generating set and store in a clean, dry place.
- Disconnect the battery.
- Make sure engine coolant is at proper level.
- If generator is mounted on a trailer, jack trailer up and place on block so tires do touch the ground or remove tires.

Jacket Water Heater and Internal Battery Charger 120 VAC Input Receptacles (OPTIONAL)

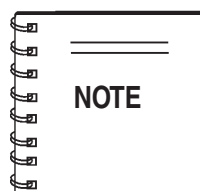
This generator is equipped with two 120 VAC, 20 amp input receptacles located on the output terminal panel.

The purpose of these receptacles is to provide power via commercial power to the **jacket water heater** and **internal battery charger**.

These receptacles will **ONLY** function when commercial power has been supplied to them (Figure 75). To apply commercial power to these receptacles, a power cord of adequate size will be required (See Table 5).

When using the generator in **hot** climates there is no reason to apply power to jacket water heater. However, if the generator will be used in **cold** climates it is always a good idea to apply power to the jacket water heater at all times. To apply power to the jacket water heater simply apply power to the jacket water heater receptacle via commercial power using an power cord of adequate size.

If the generator will be used daily, the battery should normally not require charging. If the generator will be idle (not used) for long periods of time, apply power to the battery charger receptacle via commercial power using an power cord of adequate size.



To ensure adequate starting capability, **always** have power applied to the generator's **internal battery charger**.

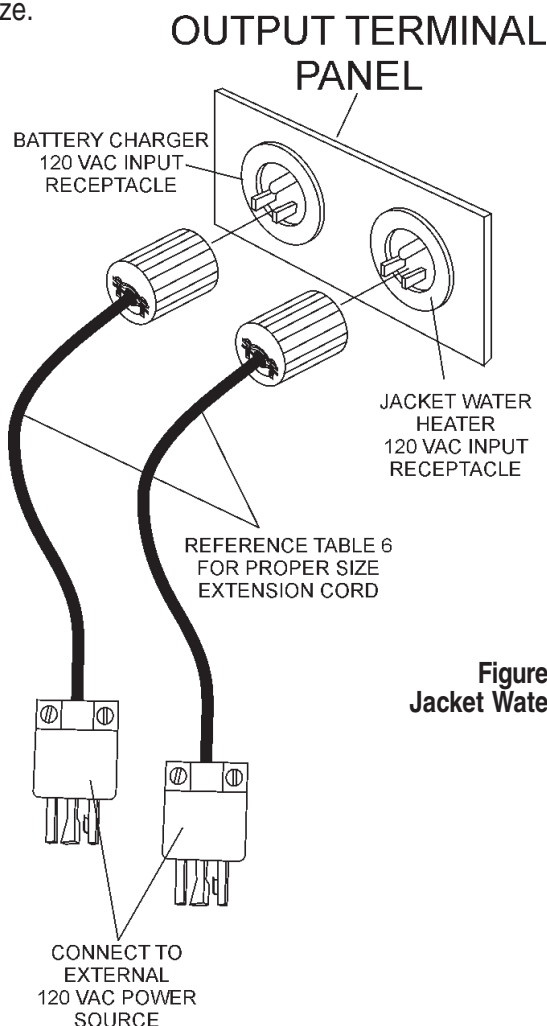


Figure 75. Battery Charger & Jacket Water Heater Power Connections

DCA-125SSJU SERIES — TRAILER BRAKES MAINTENANCE

Brakes

Trailer brakes should be inspected the **first 200 miles** of operation. This will allow the brake shoes and drums to seat properly. After the first 200 mile interval, inspect the brakes **every 3,000 miles**. If driving over rough terrain, inspect the brakes more frequently.

Figure 74 displays the major hydraulic surge brake components that will require inspection and maintenance. Please inspect these components as required using steps 1 through 8 as listed below:

Brake Adjustment

1. Place the trailer on jack stands. Make sure the jack stands are placed on secure level ground.
2. Check the wheel and drum for free rotation.
3. Remove the adjusting hole cover from the adjusting slot at the bottom brake backing plate.
4. With a screwdriver or standard adjusting tool, rotate the star wheel of the adjuster assembly to expand the brake shoes.
5. Adjust the brake shoes outward until the pressure of the lining against the wheel drum makes the wheel difficult to turn.
6. Adjust, rotate the star wheel in the opposite direction until the wheel rotates freely with slight lining drag.
7. Replace the adjusting hole cover and lower the trailer to the ground.
8. Repeat steps 1 through 7 on the remaining brakes.

Hydraulic Surge Brakes

Hydraulic surge brakes (Figure 76) should not require any special attention with the exception of routine maintenance such as shoe and lining replacement. Brake lines should be periodically checked for cracks, kinks, or blockage.

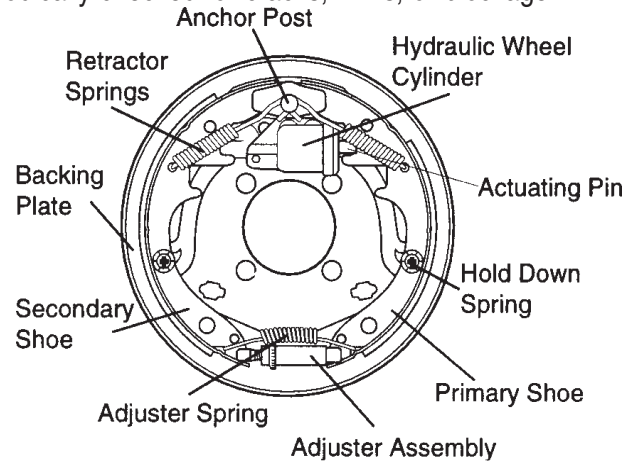


Figure 76. Hydraulic Brake Components

Actuator

Hydraulic surge braking requires the installation of an actuator at the tongue of the trailer. Remember the **surge** or **push** of the trailer toward the tow vehicle automatically synchronizes the trailer brakes with the tow vehicle brakes. As the trailer pushes against the tow vehicle the actuator telescopes together and applies force to the master cylinder, supplying hydraulic pressure to the trailer brakes.

Periodically check and test the surge “**actuator**” to make sure that it is functioning correctly. Never use an undersize actuator.

Table 15. Hydraulic Brake Troubleshooting

Symptom	Possible Cause	Solution
No Brakes	Brake line broken or kinked?	Repair or replace.
Weak Brakes or Brakes Pull to One Side	Brake lining glazed?	Reburnish or replace.
	Trailer overloaded?	Correct weight.
	Brake drums scored or grooved?	Machine or replace.
	Tire pressure correct?	Inflate all tires equally.
	Tires unmatched on the same axle?	Match tires.
Locking Brakes	Brake components loose, bent or broken?	Replace components.
	Brake drums out-of-round?	Replace.
Noisy Brakes	System lubricated?	Lubricate.
	Brake components correct?	Replace and correct.
Dragging Brakes	Brake lining thickness incorrect or not adjusted correctly?	Install new shoes and linings.
	Enough brake fluid or correct fluid?	Replace rubber parts fill with dot 4 fluid.

DCA-125SSJU SERIES —TRAILER MAINTENANCE

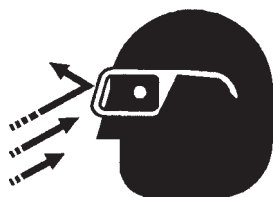
Tires/Wheels/Lug Nuts

Tires and wheels are a very important and critical components of the trailer. When specifying or replacing the trailer wheels it is important the wheels, tires, and axle are properly matched.

CAUTION:



DO NOT attempt to repair or modify a wheel. **DO NOT** install in inner tube to correct a leak through the rim. If the rim is cracked, the air pressure in the inner tube may cause pieces of the rim to explode (break off) with great force and cause serious eye or bodily injury.



Tire Wear/Inflation

Tire inflation pressure is the most important factor in tire life. Pressure should be checked cold before operation **DO NOT** bleed air from tires when they are **hot!** Check inflation pressure weekly during use to insure the maximum tire life and tread wear.

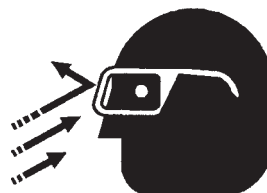
Table 16 (Tire Wear Troubleshooting) will help pinpoint the causes and solutions of tire wear problems.

TABLE 16. TIRE WEAR TROUBLESHOOTING			
WEAR PATTERN		CAUSE	SOLUTION
	Center Wear	Over Inflation.	Adjust pressure to particular load per tire manufacturer.
	Edge Wear	Under Inflation.	Adjust pressure to particular load per tire manufacturer.
	Side Wear	Loss of camber or overloading.	Make sure load does not exceed axle rating. Align wheels.
	Toe Wear	Incorrect toe-in.	Align wheels.
	Cupping	Out-of-balance.	Check bearing adjustment and balance tires.
	Flat Spots	Wheel lockup & tire skidding.	Avoid sudden stops when possible and adjust brakes.

CAUTION:



ALWAYS wear safety glasses when removing or installing force fitted parts. Failure to comply may result in serious injury.



Suspension

The **leaf suspension** springs and associated components (Figure 77) should be visually inspected every 6,000 miles for signs of excessive wear, elongation of bolt holes, and loosening of fasteners. Replace all damaged parts (suspension) immediately. Torqued suspension components as detailed in Table 17.

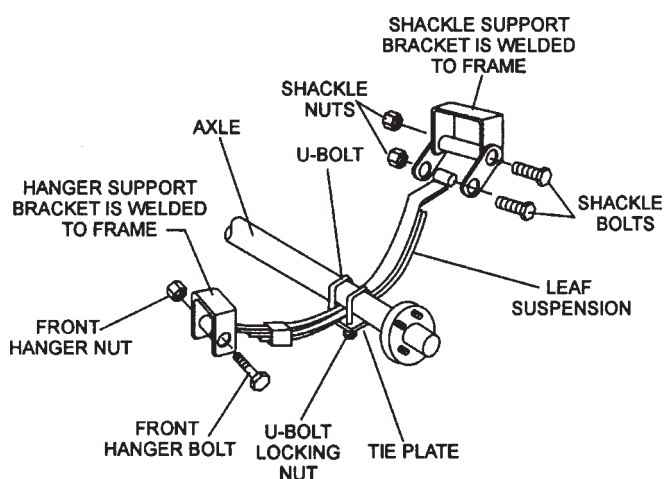


Figure 77. Major Suspension Components

Table 17. Suspension Torque Requirements

Item	Torque (Ft.-Lbs.)
3/8" U-BOLT	MIN-30 MAX-35
7/16" U-BOLT	MIN-45 MAX-60
1/2" U-BOLT	MIN-45 MAX-60
SHACKLE BOLT SPRING EYE BOLT	SNUG FIT ONLY. PARTS MUST ROTATE FREELY. LOCKING NUTS OR COTTER PINS ARE PROVIDED TO RETAIN NUT-BOLT ASSEMBLY.
SHOULDER TYPE SHACKLE BOLT	MIN-30 MAX-50

DCA-125SSJU SERIES — TRAILER MAINTENANCE

Lug Nut Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on the trailer. Be sure to use only the fasteners matched to the cone angle of the wheel. Proper procedure for attachment of the wheels is as follows:

1. Start all wheel lug nuts by hand.
2. Torque all lug nuts in sequence. See Figure 78. **DO NOT** torque the wheel lug nuts all the way down. Tighten each lug nut in 3 separate passes as defined by Table 18.
3. After first road use, retorque all lug nuts in sequence. Check all wheel lug nuts periodically.

Table 18. Tire Torque Requirements

Wheel Size	First Pass FT-LBS	Second Pass FT-LBS	Third Pass FT-LBS
12"	20-25	35-40	50-65
13"	20-25	35-40	50-65
14"	20-25	50-60	90-120
15"	20-25	50-60	90-120
16"	20-25	50-60	90-120

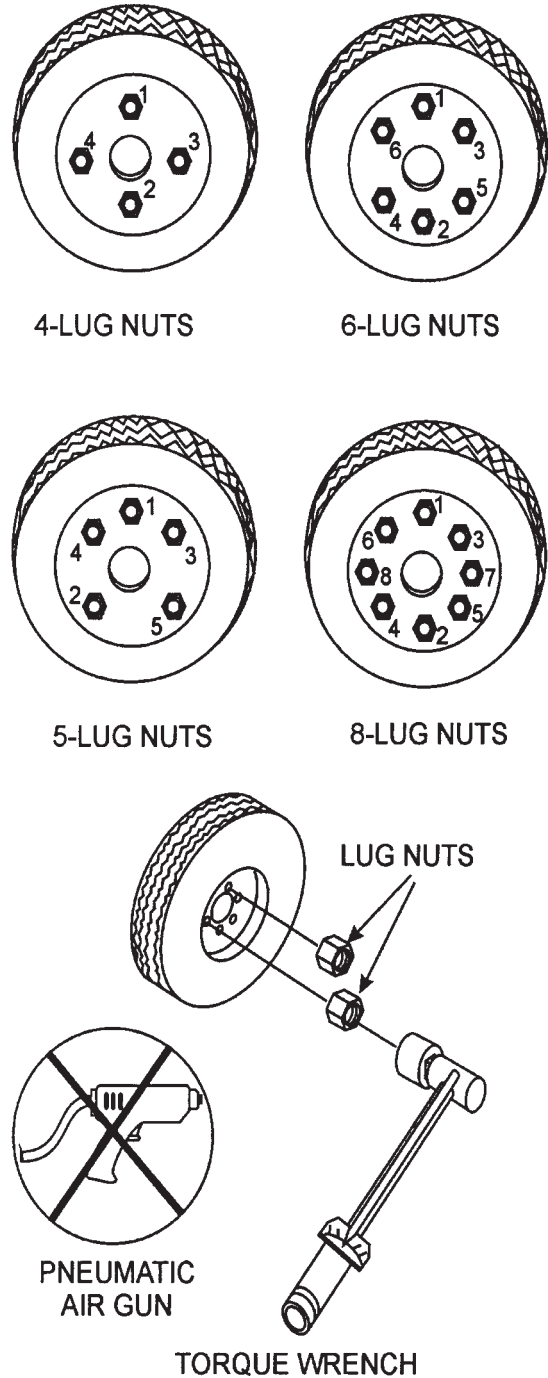
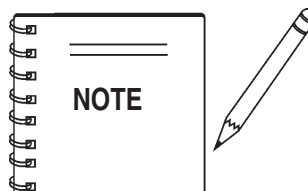


Figure 78. Wheel Lug Nuts Tightening Sequence



NEVER use an pneumatic air gun to tighten wheel lug nuts.

DCA-125SSJU SERIES — TRAILER WIRING DIAGRAM

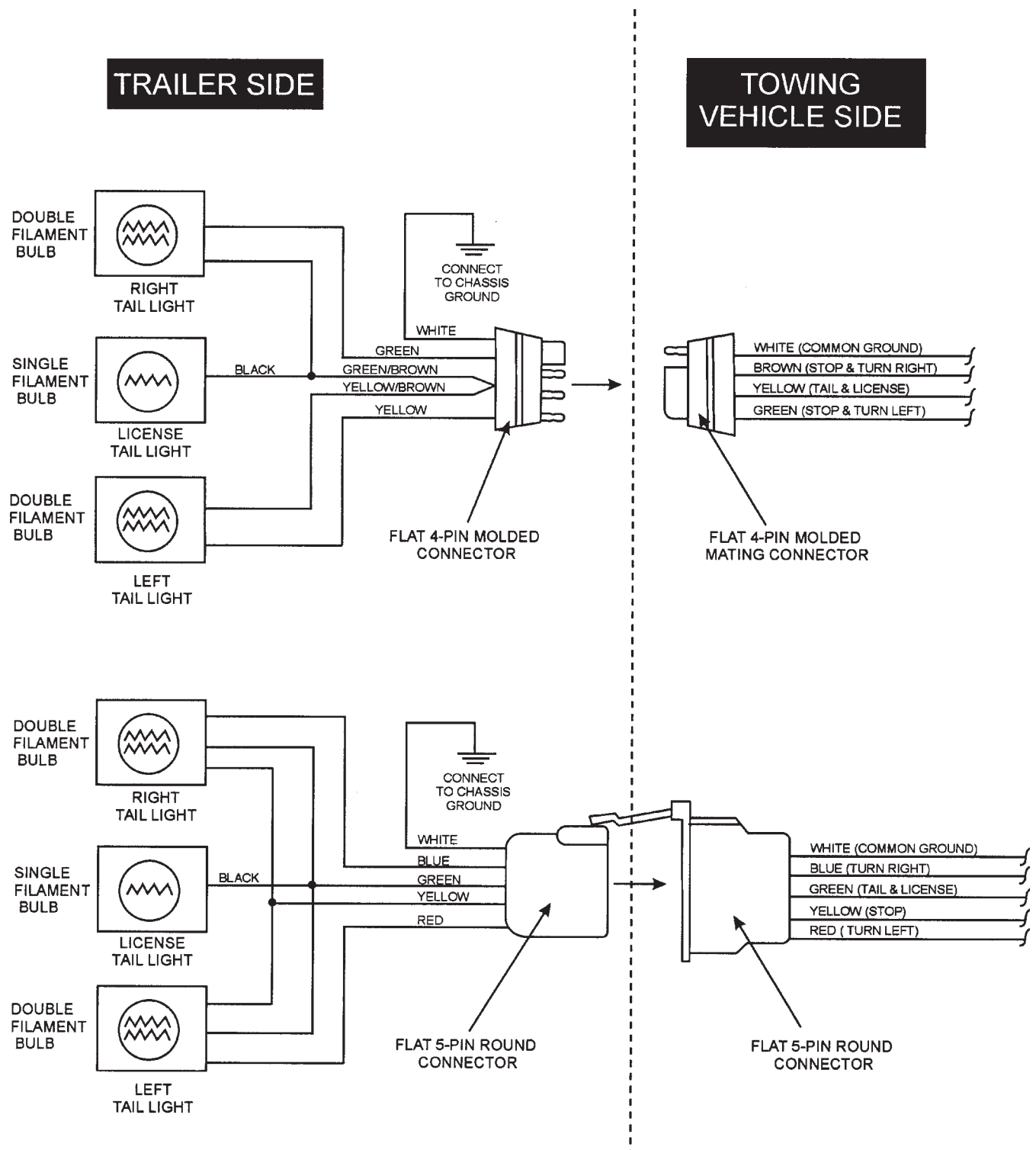


Figure 79. Trailer/Towing Vehicle Wiring Diagram

DCA-125SSJU SERIES — GENERATOR WIRING DIAGRAM

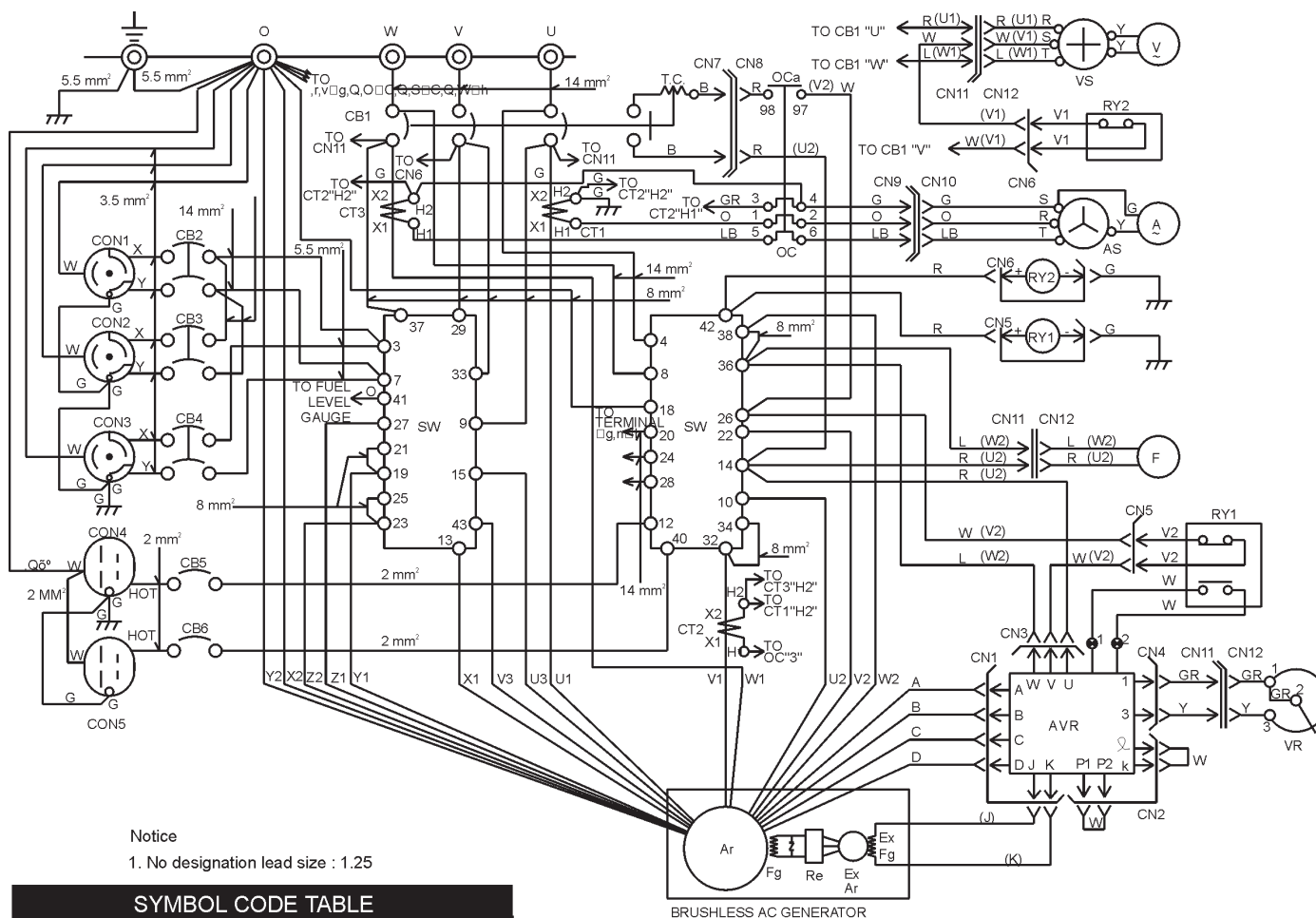


Figure 80. Generator Wiring Diagram

SYMBOL CODE TABLE

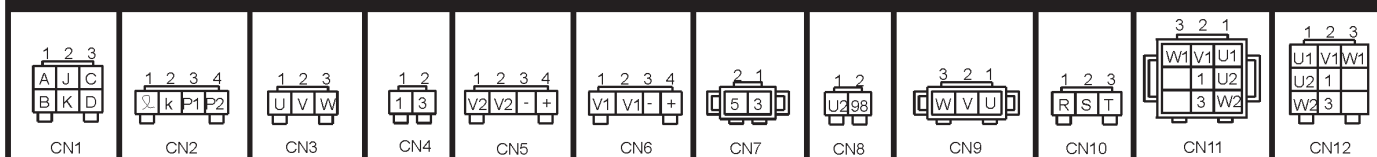
SYMBOL	DESIGNATION
Ar	MAIN GENERATOR ARMATURE WINDING
Fg	MAIN GENERATOR FIELD WINDING
ExAr	EXCITER ARMATURE WINDING
ExFg	EXCITER FIELD WINDING
Re	RECTIFIER
AVR	AUTOMATIC VOLTAGE REGULATOR
VR	VOLTAGE REGULATOR (RHEOSTAT)
CT 1,2,3	CURRENT TRANSFORMER
AS	CHANGE-OVER SWITCH, AMMETER
A	AC. AMMETER
VS	CHANGE-OVER SWITCH, VOLTMETER
V	AC. VOLTMETER
F	FREQUENCY METER
Cb1	CIRCUIT BREAKER
CB 2,3,4	CIRCUIT BREAKER
CB 5,6	CIRCUIT BREAKER
CON 1,2,3	RECEPTACLE
CON 4,5	RECEPTACLE
OC	OVER CURRENT RELAY
SW	SELECTOR SWITCH
RY1,2	RELAY UNIT

COLOR CODE TABLE

CODE/ WIRE COLOR			
B	BLACK	R	RED
L	BLUE	W	WHITE
BR	BROWN	Y	YELLOW
G	GREEN	LB	LIGHT BLUE
GR	GRAY	LG	LIGHT GREEN
V	VIOLET	O	ORANGE
P	PINK		

CONNECTOR ARRANGEMENT

(WIRING VIEW)



DCA-125SSJU SERIES — ENGINE WIRING DIAGRAM (IGNITION SWITCH)

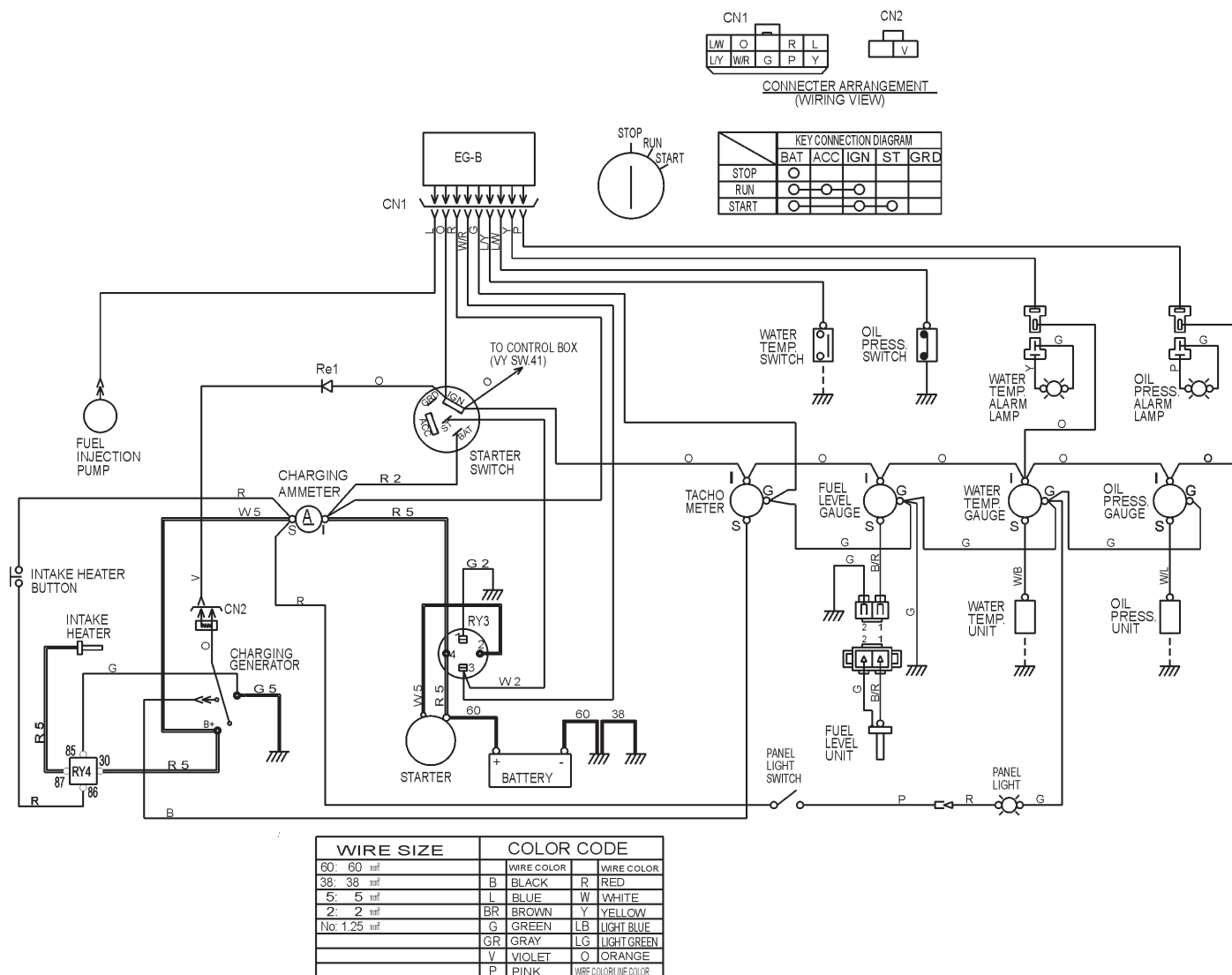


Figure 81. Engine Wiring Diagram(Ignition Switch)

DCA-125SSJU SERIES — ENGINE WIRING DIAGRAM (ENGINE CONTROLLER)

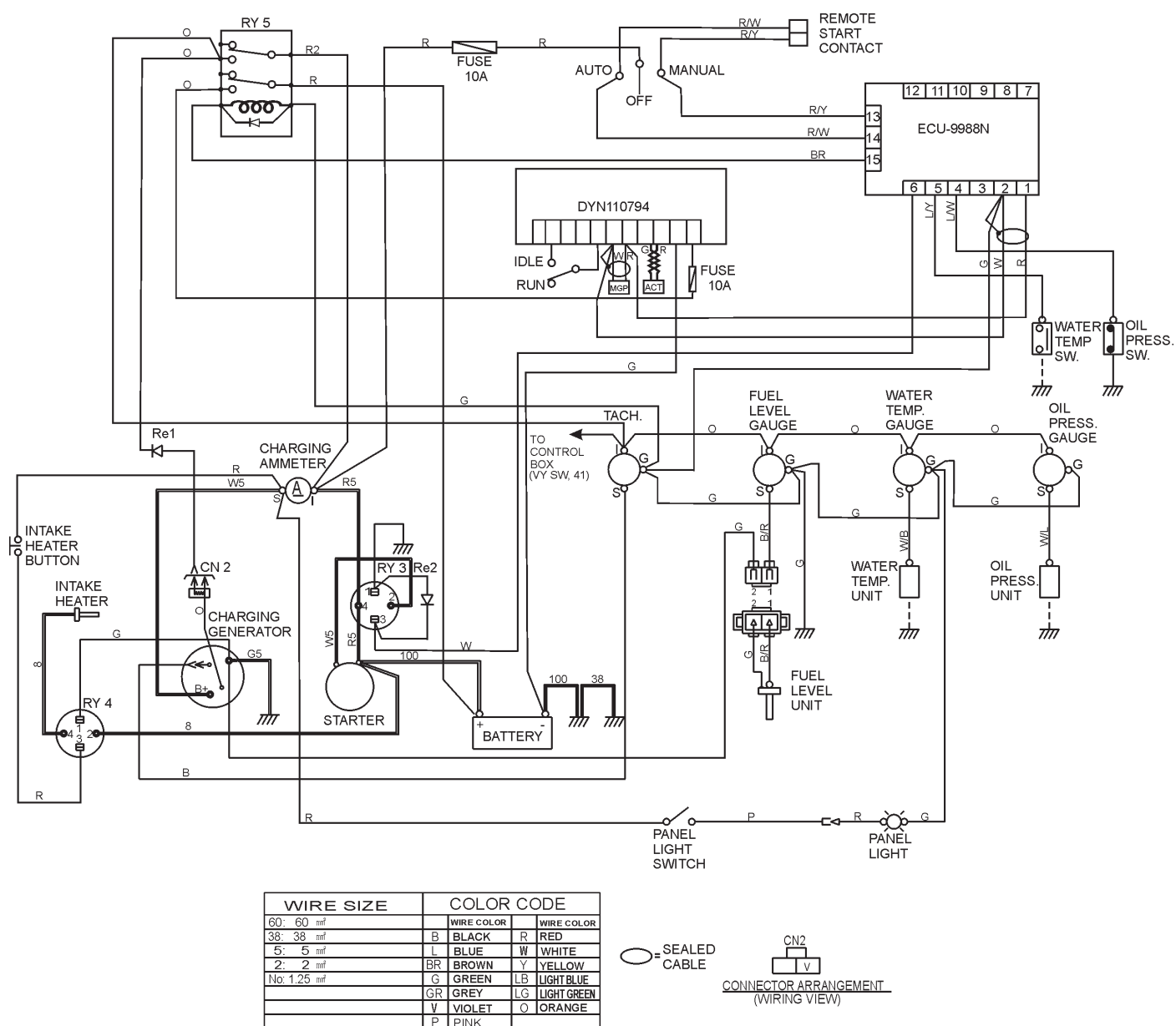


Figure 82. Engine Wiring Diagram (Engine Controller)

[illegible]

DCA-125SSJU SERIES — TROUBLESHOOTING (ENGINE)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the table shown below and on the next page for diagnosis based on the Engine Troubleshooting (Table 19). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 19. ENGINE TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Engine does not start.	No fuel?	Replenish fuel.
	Air in the fuel system?	Bleed system.
	Water in the fuel system?	Remove water from fuel tank.
	Fuel pipe clogged?	Clean fuel pipe.
	Fuel filter clogged?	Clean or change fuel filter.
	Excessively high viscosity of fuel or engine oil at low temperature?	Use the specified fuel or engine oil.
	Fuel with low cetane number?	Use the specified fuel.
	Fuel leak due to loose injection pipe retaining nut?	Tighten nut.
	Incorrect injection timing?	Adjust.
	Fuel cam shaft worn?	Replace.
	Injection nozzle clogged?	Clean injection nozzle.
	Injection pump malfunctioning?	Repair or replace.
	Seizure of crankshaft, camshaft, piston, cylinder liner or bearing?	Repair or replace.
	Compression leak from cylinder?	Replace head gasket, tighten cylinder head bolt, glow plug and nozzle holder.
	Improper valve timing?	Correct or replace timing gear.
	Piston ring and liner worn?	Replace.
	Excessive valve clearance?	Adjust.
Starter does not run.	Starter malfunctioning?	Repair or replace.
	Wiring disconnected?	Connect wiring.

DCA-125SSJU SERIES — TROUBLESHOOTING (ENGINE)

TABLE 19. ENGINE TROUBLESHOOTING (CONTINUED)

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Engine revolution is not smooth.	Fuel filter clogged or dirty?	Clean or change.
	Air cleaner clogged?	Clean or change.
	Fuel leak due to loose injection pipe retaining nut?	Tighten nut.
	Injection pump malfunctioning?	Repair or replace.
	Incorrect nozzle opening pressure?	Adjust.
	Injection nozzle stuck or clogged?	Repair or replace.
	Fuel over flow pipe clogged?	Clean.
	Governor malfunctioning?	Repair.
Either white or blue exhaust gas is observed.	Excessive engine oil?	Reduce to the specified level.
	Piston ring and liner worn or stuck?	Repair or replace.
	Incorrect injection timing?	Adjust.
	Deficient compression?	Adjust top clearance.
Either black or dark gray exhaust gas is observed.	Overload?	Lessen the load.
	Low grade fuel used?	Use the specified fuel.
	Fuel filter clogged?	Clean or change.
	Air cleaner clogged?	Clean or change.
	Deficient nozzle injection?	Repair or replace the nozzle.
Deficient output.	Incorrect injection timing?	Adjust.
	Engine's moving parts seem to be seizing?	Repair or replace.
	Uneven fuel injection?	Repair or replace the injection pump.
	Deficient nozzle injection?	Repair or replace the nozzle.
	Compression leak?	Replace head gasket, tighten cylinder head bolt, glow plug and nozzle holder.

DCA-125SSJU SERIES — TROUBLESHOOTING (GENERATOR)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the table shown below for diagnosis based on the Generator Troubleshooting (Table 20). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 20. GENERATOR TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
No Voltage Output	AC Voltmeter defective?	Check output voltage using a voltmeter.
	Is wiring connection loose?	Check wiring and repair.
	Is AVR defective?	Replace if necessary.
	Defective Rotating Rectifier?	Check and replace.
Low Voltage Output	Is engine speed correct?	Turn engine throttle lever to "High".
	Is wiring connections loose?	Check wiring and repair.
	Defective AVR?	Replace if necessary.
High Voltage Output	Is wiring connections loose?	Check wiring and repair.
	Defective AVR?	Replace if necessary.
Circuit Breaker Tripped	Short Circuit in load?	Check load and repair.
	Over current?	Confirm load requirements and reduce.
	Defective circuit breaker?	Check and replace.
	Over current Relay actuated?	Confirm load requirement and replace.

DCA-125SSJU SERIES — TROUBLESHOOTING (MPEC)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, use the table shown below for diagnosis based on the MPEC Troubleshooting (Table 21). If the problem cannot be remedied, consult our company's business office or service plant.

TABLE 21. ENGINE CONTROLLER TROUBLESHOOTING

Sympton	Possible Cause	Solution
Low oil pressure light is on.	Low oil level?	Fill oil level.
	Oil pressure sending unit failure?	Replace oil pressure sending unit.
	Time delay malfunction in Controller?	Refer to dealer.
	Wire shorted?	Inspect/repair wire.
Low coolant level light is on.	Low coolant level?	Fill coolant level.
	Sending unit failure?	Replace sending unit.
	Low battery voltage?	Replace/charge battery.
High coolant temperture light is on.	Fan belt tension incorrect?	Tighten/replace fan belt.
	Air flow is not circulation through radiator?	Clean/repair radiator grill.
	Doors open?	Close doors.
	Exhaust leaking?	Replace/repair gaskets or faulty part.
	Generator being overloaded?	Check/reduce load.
	Thermostat failure?	Replace thermostat.
	Air intake blocked?	Clear all air intakes.
	Temperature switch failure?	Replace temperature switch.
Overcrank light is on.	No or low Fuel?	Fill fuel level.
	Controller needs to be calibrated?	Refer to dealer.
Overspeed light is on.	RPM engine speed too high?	Adjust RPM.
	Governor actuator needs to be adjusted?	Adjust governor actuator.
	Governor controller needs to be adjusted?	Adjust governor controller.
	Engine Controller needs to be calibrated?	Refer to dealer.
Loss of MPU light(s) or on.	Magnetic pick up out of adjustment?	Adjust magnetic pick up.
	Magnetic pick up dirty?	Clean magnetic pick up.

EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

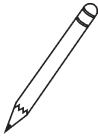
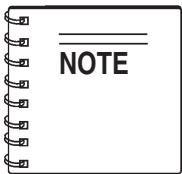
Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

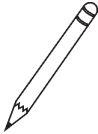
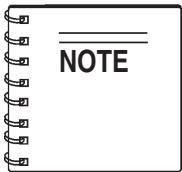
Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

Items Found In the “Items Number” Column

All parts with same symbol in the number column, *, #, +, %, or <, belong to the same assembly or kit



If more than one of the same reference number is listed, the last one listed indicates newest (or latest) part available.

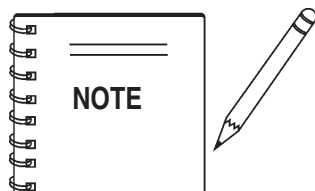


The contents of this catalog are subject to change without notice.

DCA-125SSJU SERIES — SUGGESTED SPARE PARTS

DCA-125SSJU & DCA-125SSJU2 W/JOHN DEERE 6080TF250 DIESEL ENGINE 1 TO 3 UNITS

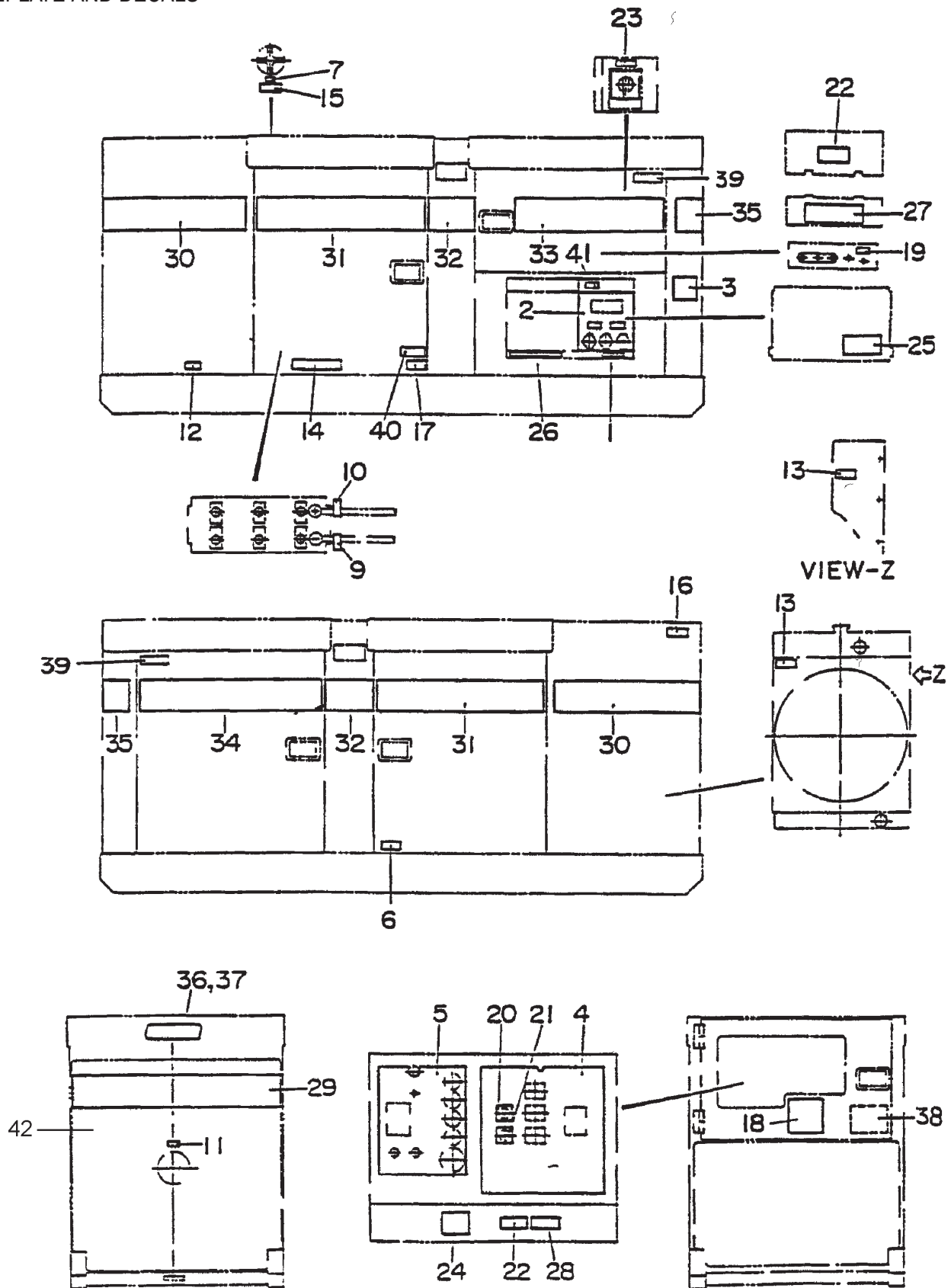
<u>Qty.</u>	<u>P/N</u>	<u>Description</u>	<u>Remarks</u>
1	0601820671	AUTOMATIC VOLTAGE REGULATOR	
1	0601840073	RHEOSTAT VOLTAGE REGULATOR	
1	0601840121	KNOB, RHEOSTAT	
1	47230107	KNOB, SELECTOR SWITCH	
1	M3310500003	RADIATOR HOSE, UPPER	S/N 7500001TO7500307
1	M3310500403	RADIATOR HOSE, UPPER	S/N 7500307~
1	M3310500103	RADIATOR HOSE, LOWER	S/N 7500001TO7500307
1	M3310500503	RADIATOR HOSE, LOWER	S/N 7500307~
5	0602041290	OIL FILTER	
5	0602042590	FUEL FILTER	
5	0602046377	AIR ELEMENT	
3	0602042420	FUEL FILTER, FUEL TANK	
1	0602122272	UNIT, OIL PRESSURE	
1	0602123261	UNIT, WATER TEMPERATURE	
1	0601810245	BULB, ALARM LAMP	
1	R1234145	FAN BELT	
1	0602122281	OIL SHUTDOWN SWITCH	S/N 7500001TO7500507
1	0602100056	STARTER SWITCH	
1	AR51481	KEY, STARTER SWITCH	
1	M9310000103	ENCLOSURE CAP	
1	M1483600204	ENCLOSURE CAP CHAIN ASSEMBLY	
1	ECU9988NJD	CONTROLLER ECU	



Part number on this Suggested Spare Parts list may supercede/replace the P/N shown in the text pages of this book.

DCA-125SSJU SERIES — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS



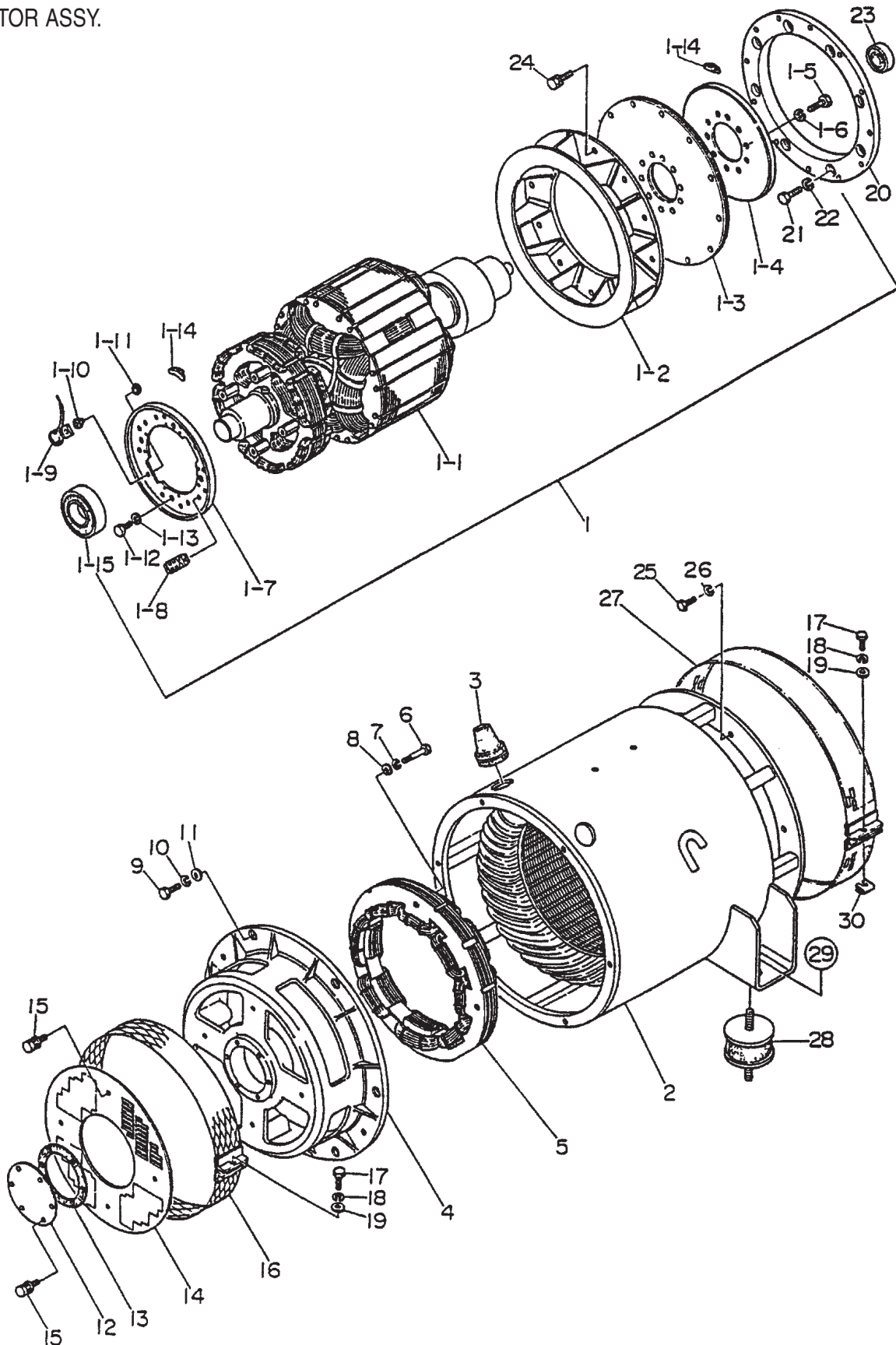
DCA-125SSJU SERIES — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M1550000204	DECAL, NOTE	1	M15000020
2	M1550000703	DECAL, AUXILLIARY OUTPUT	1	M15000070
3	M3550000004	DECAL, NOTE	1	M35000000
4	M3550000102	DECAL, GENERATOR CONTROL	1	M35000010
5	M3550000202	DECAL, ENGINE OPERATING M35000020	1	S/N7500001 TO S/N7500507
	M3550000212	DECAL, ENGINE OPERATING M35000020	1	S/N7500508~
6	M9500000004	DECAL, OIL DRAIN PLUG	1	M90000000
7	M9500100004	DECAL, WATER	1	M90010000
8	M9500100104	DECAL, WATER DRAIN PLUG, M90010010	1	S/N7500001 TO 7500307
9	M9500300004	DECAL, -	1	M90030000
10	M9500300104	DECAL, +	1	M900500000
11	M9500500004	DECAL, DIESEL FUEL	1	M90050000
12	M9500500104	DECAL, FUEL DRAIN PLUG	1	M90050010
13	M9503000004	DECAL, WARNING	1	M9030000
14	M9503000103	DECAL, WATER/OIL CHECK	1	M90310010
15	M9503100004	DECAL, WARNING	1	M90310000
16	M9503200004	DECAL, WARNING	1	M90320000
17	M9510100004	DECAL, CAUTION	1	M91010000
18	M9510200002	DECAL, MQ	1	M91020000
19	M9520000004	DECAL, GROUND	1	M92000000
20	M9520000104	DECAL, AMMETER CHANGE-OVER SW.	1	M92000010
21	M9520000204	DECAL, VOLTMETER CHANGE-OVER SW.	1	M92000020
22	M9520100004	DECAL, WARNING	2	M92010000
23	M9520100204	DECAL, CAUTION	1	M92010020A
24	M9520100304	DECAL, SAFETY INSTRUCTIONS	1	M92010030
25	M9520100404	DECAL, DANGER	1	M92010040
26	M9520100503	DECAL, WARNING	1	M92010050
27	M9520200003	DECAL, CONNECTION OF OUTPUT CABLE	1	M92020010
28	M9520200104	DECAL, OVER CURRENT RELAY	1	M92020010
29	M9560100003	STRIPE, WHISPERWATT	1	
30	M3560100103	STRIPE, MQ POWER	2	
31	M3560100203	STRIPE	2	
32	M3560100404	STRIPE	2	
33	M3560100303	STRIPE, 125	1	
34	M3650100503	STRIPE, 125	1	
35	M3650100604	STRIPE	3	
36	M0600500090	EMBLEM	1	
37	0021106015	MACHINE SCREW	2	
38	M3552000103	DECAL, OPERATING PROC., M35200010	1	S/N7500508~
39	B152000103	DECAL, CAUTION, B15200010	2	S/N7500508~
40	C95053000004	DECAL, CAUTION, C90530000	1	S/N7500508~
41	9039209064	DECAL, START CONTACT, S-4468	1	S/N7500508~
42	TBD	DECAL, FUELING PROCEDURE	1	

DCA-125SSJU SERIES — GENERATOR ASSY.

GENERATOR ASSY.



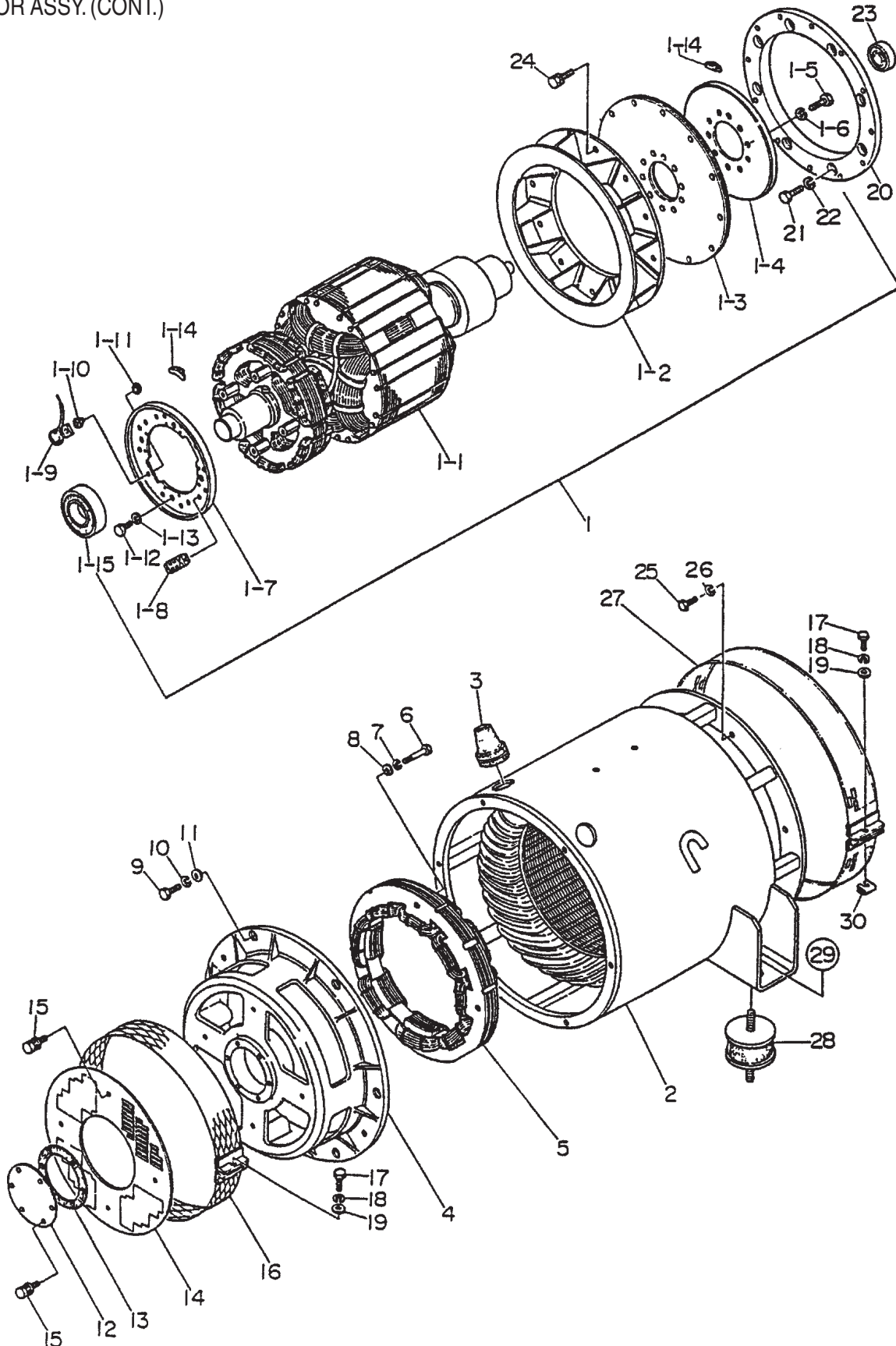
DCA-125SSJU SERIES — GENERATOR ASSY.

GENERATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	C0110000002	ROTOR ASSY.	1	
1-1		FIELD ASSY.	1	
1-2	8131070013	FAN	1	
1-3	8131611014	COUPLING DISK	8	
1-4	8131015003	BALANCING PLATE	1	
1-5	0012112035	HEX. HEAD BOLT	10	
1-6	0042612000	LOCK WASHER	10	
1-7	8101026013	SET PLATE	1	
1-8	0601821349	RECTIFIER	2	PT3610
1-9	0601822601	SURGE ABSORBER	1	ERZM14JK621A
1-10	8001020004	INSULATOR WASHER	1	
1-11	8001020504	INSULATOR WASHER	1	
1-12	0010110020	HEX. HEAD BOLT	4	
1-13	0040010000	LOCK WASHER	4	
1-14	0601000209	BALANCING WEIGHT KIT	1	
1-15	0071906312	BEARING	1	6312 DDU C3
2	8131340213	STRATOR ASSY.	1	
3	0845041804	GROMMET	2	
4	8131315202	END BRACKET	1	
5	8101350013	FIELD ASSY. EXCITER	1	
6	0012110060	HEX. HEAD BOLT	4	
7	0042610000	LOCK WASHER	4	
8	031110160	PLAIN WASHER	4	REPLACES 0041210000
9	0010112035	HEX. HEAD BOLT	6	
10	0040012000	LOCK WASHER	6	
11	031112230	PLAIN WASHER	6	REPLACES 0041212000
12	8131310104	COVER, BEARING	1	
13	8131312204	GASKET, BEARING	1	
14	8131331003	COVER, END BRACKET	1	
15	0105050616	HEX. HEAD BOLT	10	REPLACES 0017106012

DCA-125SSJU SERIES — GENERATOR ASSY. (CONT.)

GENERATOR ASSY. (CONT.)



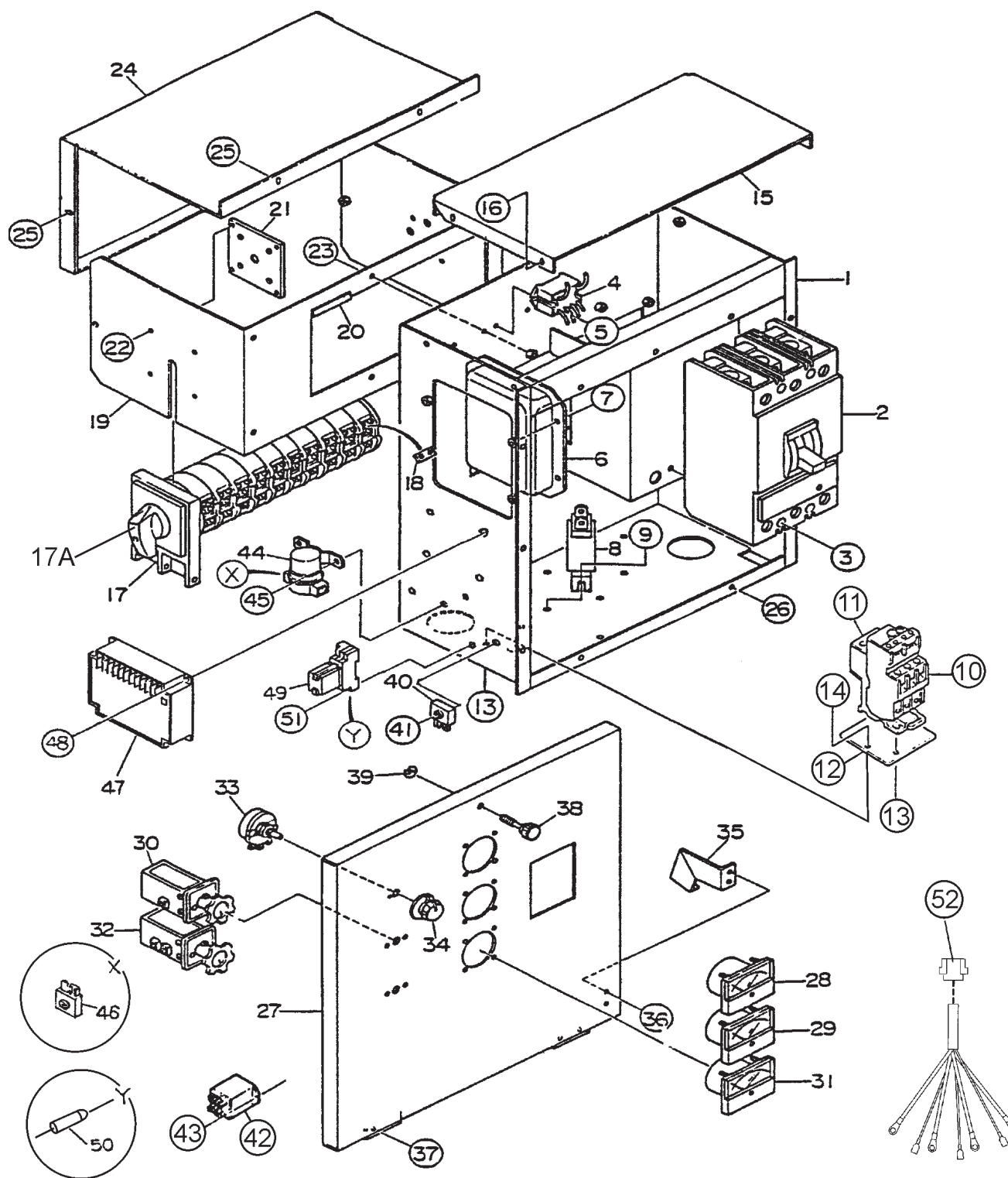
DCA-125SSJU SERIES — GENERATOR ASSY. (CONT.)

GENERATOR ASSY. (CONT.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
16	8101333003	COVER, END BRACKET	1	
17	0010106030	HEX. HEAD BOLT	2	
18	0040006000	LOCK WASHER	2	
19	952404470	PLAIN WASHER	2	REPLACES 0041206000
20	M3163400003	COUPLING RING	1	
21	0013904044	HEX. HEAD BOLT	8	S/N 7500001 TO 7500242
21	0343204150	HEX. HEAD BOLT	8	S/N 7500243~
22	EM923344	LOCK WASHER	8	REPLACES 0043604000
23	0070506306	BEARING	1	6306ZZ
24	0012810030	HEX. HEAD BOLT	12	
25	0012810030	HEX. HEAD BOLT	12	S/N 7500001 TO 7500242
25	0010310035	HEX. HEAD BOLT	12	S/N 7500243~
26	0042510000	LOCK WASHER	12	S/N 7500001 TO 7500242
27	8131332003	COVER, FAN	1	S/N 7500001 TO 7500242
27	8131332014	COVER, FAN	1	S/N 7500243~
28	0605000063	RUBBER SUSPENSION	2	
29	00300165000	HEX. NUT	2	
29	0040016000	LOCK WASHER	2	
30	020106050	NUT	1	REPLACES 0600815000
		.....		S/N 7500004~

DCA-125SSJU SERIES — CONTROL BOX ASSY.

CONTROL BOX ASSY.



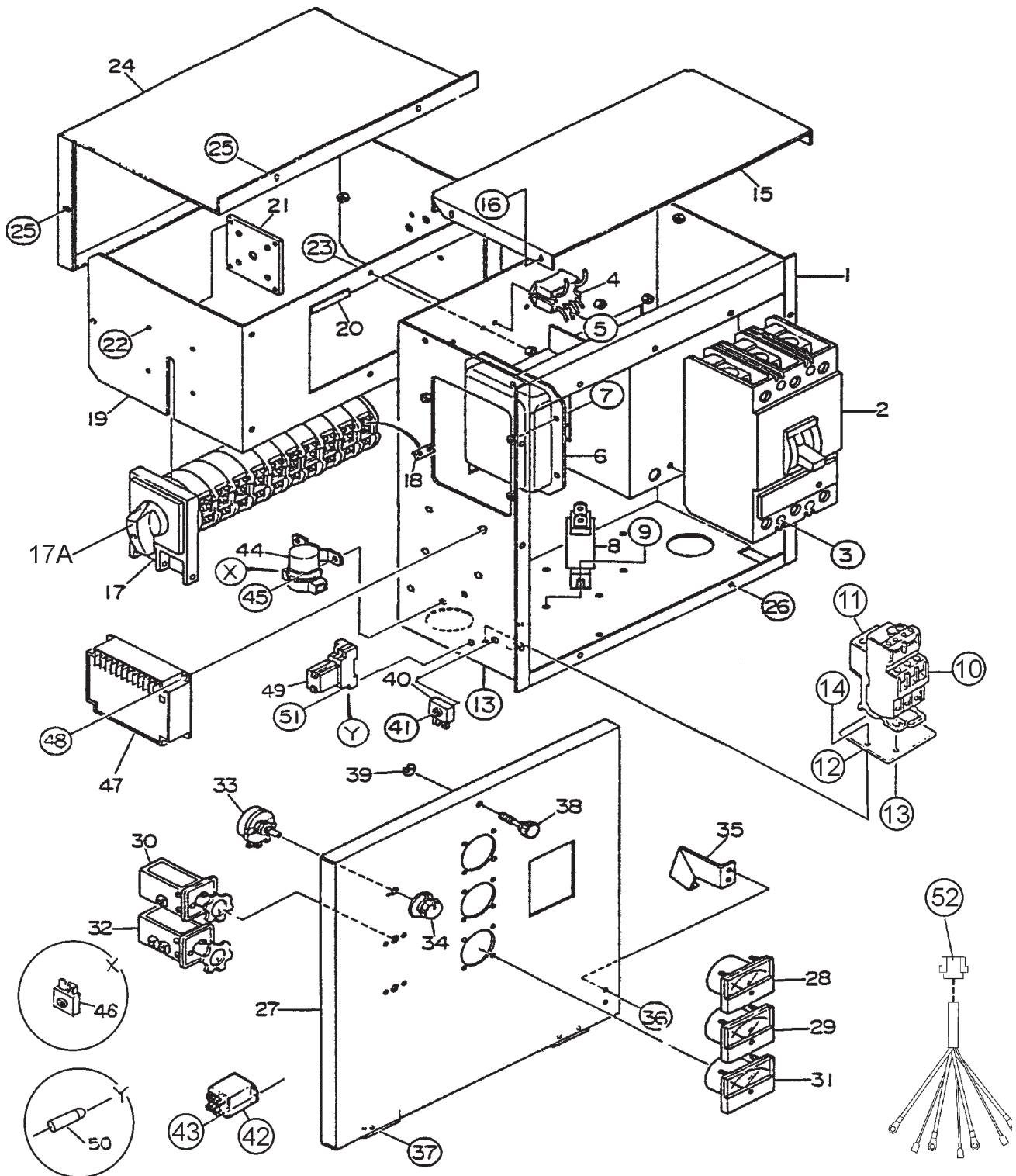
DCA-125SSJU SERIES — CONTROL BOX ASSY.

CONTROL BOX ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3213000102	CONTROL BOX	1	S/N 7500001 TO 7500048
1	M3213000112	CONTROL BOX	1	S/N 7500049 TO 7500222
1	M3213000122	CONTROL BOX	1	S/N 7500223 TO 7500507
1	M3213000132	CONTROL BOX	1	S/N 7500508~
2	0601808813	CIRCUIT BREAKER	1	LAF363001021 3P 300A
3	0021006080	MACHINE SCREW	4	
4	0601823863	RELAY UNIT	2	MSA9013A
5	0021304015	MACHINE SCREW	4	REPLACES 0027104015
6	0601820671	AUTOMATIC VOLTAGE REGULATOR	1	NTA5A2DB
7	0027105010	MACHINE SCREW	4	S/N 7500001 TO 7500222
7	0027105015	MACHINE SCREW	4	S/N 7500223~
8	0601806118	CURRENT TRANSFORMER	3	814943 200/5A
9	011808015	MACHINE SCREW	6	REPLACES 0027106015
10	0601820845	OVER CURRENT RELAY	1	LR2D1308
11	0601820846	OVER CURRENT RELAY	1	LA7D1064
12	M1260600004	FITTING BRACKET	1	S/N 7500001 TO 7500222
13	0021304015	MACHINE SCREW	2	REPLACES 0027104015
13	0030004000	HEX. NUT	2	REPLACES 0207004000
14	0027105020	MACHINE SCREW	4	
15	M3213500003	CONTROL BOX COVER	1	S/N 7500001 TO 7500048
15	M3213500013	CONTROL BOX COVER	1	S/N 7500049~
16	011106015	HEX. HEAD BOLT	4	REPLACES 0016906015
17	M3923100004	SELECTOR SWITCH	1	VY125
17A	47230107	KNOB, SELECTOR SWITCH	1	
18	M3276600004	SPACER	8	
19	M3213600003	SWITCH BRACKET	1	
20	0330000295	EDGING	2	
21	M3260500004	SWITCH BOARD	1	
22	0020004010	MACHINE SCREW	4	REPLACES 0021104010
23	011106015	HEX. HEAD BOLT	6	REPLACES 0016906015
24	M3213600114	SWITCH COVER	1	REPLACES M3213600104
25	011106015	HEX. HEAD BOLT	4	REPLACES 0016906015
26	011106015	HEX. HEAD BOLT	10	REPLACES 0016906015
26	0040506000	TOOTHED WASHER	1	
27	M3223000103	CONTROL PANEL	1	
28	0601807630	FREQUENCY METER,264250DJDJ9	1	S/N 7500001 TO 7500842
28	0601807641	FREQUENCY METER,FCF-6 45-65HZ 240V	1	S/N 7500843~

DCA-125SSJU SERIES — CONTROL BOX ASSY. (CONT.)

CONTROL BOX ASSY. (CONT.)



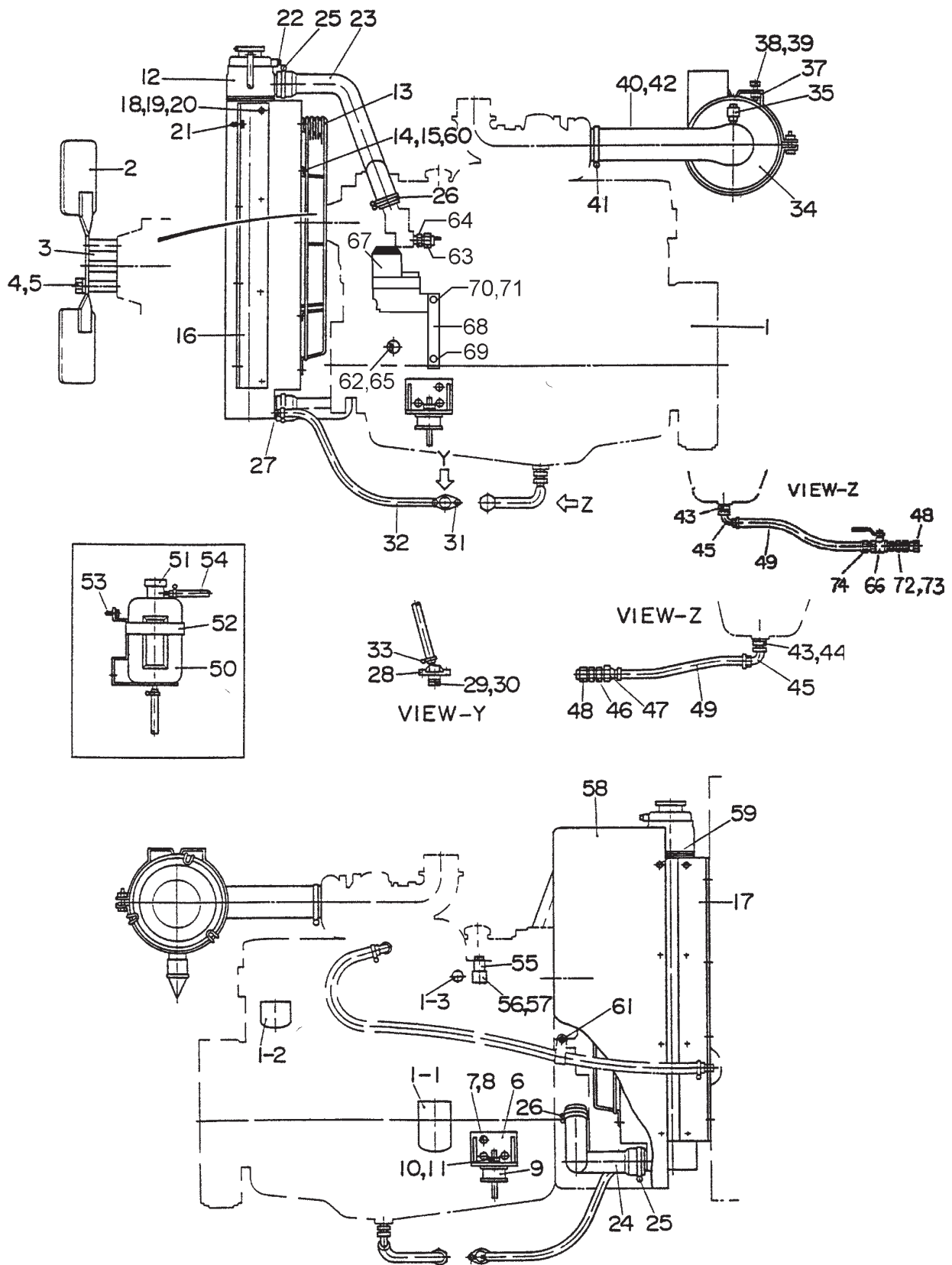
DCA-125SSJU SERIES — CONTROL BOX ASSY. (CONT.)

CONTROL BOX ASSY. (CONT.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
29	0601808953	AC AMMETER, 260240LSLS1JCA	1	S/N 7500001 TO 7500842
29	0601808988	AC AMMETER, ACF-6 - 200A,0-400A/5A ...	1	S/N 7500843~
30	0601801040	CHANGE-OVER SWITCH, AMMETER	1	SL2AS
31	0601806813	AC VOLTMETER, 260244SJSJ1	1	S/N 7500001 TO 7500842
31	0601806859	AC AMMETER, SCF-6 0-600V	1	S/N 7500843~
32	0601801041	CHANGE-OVER SWITCH, VOLTMETER	1	SL2VS
33	0601840073	RHEOSTAT (VOLTAGE REGULATOR)	1	RA20A2SE102BJ 2W 1K OHM
34	0601840121	KNOB	1	
35	M122310004	STOPPER	1	
36	0027105015	MACHINE SCREW	2	
37	0027105015	MACHINE SCREW	1	
38	M9220100004	SET SCREW	1	
39	0080200007	SNAP RING	1	
40	0601823240	RECTIFIER	1	DE4503
41	0027104020	MACHINE SCREW	1	S/N 7500001 TO 7500307
41	0027105020	MACHINE SCREW	1	S/N 7500308 TO 7500507
41	0027104020	MACHINE SCREW	1	S/N 7500508~
42	0602200478	EMERGENCY RELAY, 10701606023	1	S/N 7500001 TO 7500507
43	0027105040	MACHINE SCREW	2	S/N 7500001 TO 7500507
44	0602202592	STARTER RELAY	1	AT141011
45	011808015	MACHINE SCREW	2	REPLACES 0027106015
46	0601823240	RECTIFIER, DE4503	1	S/N 7500508~
47	DYN110794000012	CONTROLLER	1	REPLACES 0602202599
		.....		S/N 7500508~
47	MPS6724	SPEED SENSOR, MAGNETIC PICK UP ...	1	REPLACES 0602120485
48	0027105015	MACHINE SCREW	4	S/N 7500508~
49	0601823768	RELAY, LY2US12VD	1	S/N 7500508 TO 7500542
49	LY2US12VDC	RELAY	1	REPLACES 0601827656
		.....		S/N 7500543~
49	PTF08AE	BASE, RELAY SOCKET	1	REPLACES 0601823109
		.....		S/N 7500508~
49	PYCA1	CLIP	2	REPLACES 0601824400
		.....		S/N 7500508~
50	0601823223	RECTIFIER	1	30D4 S/N 7500508 TO 7500542
51	0027104020	MACHINE SCREW	2	S/N 7500508~
52	M3246700304	WIRE HARNESS, GENERATOR	1	

DCA-125SSJU SERIES — ENGINE AND RADIATOR ASSY.

ENGINE AND RADIATOR ASSY.



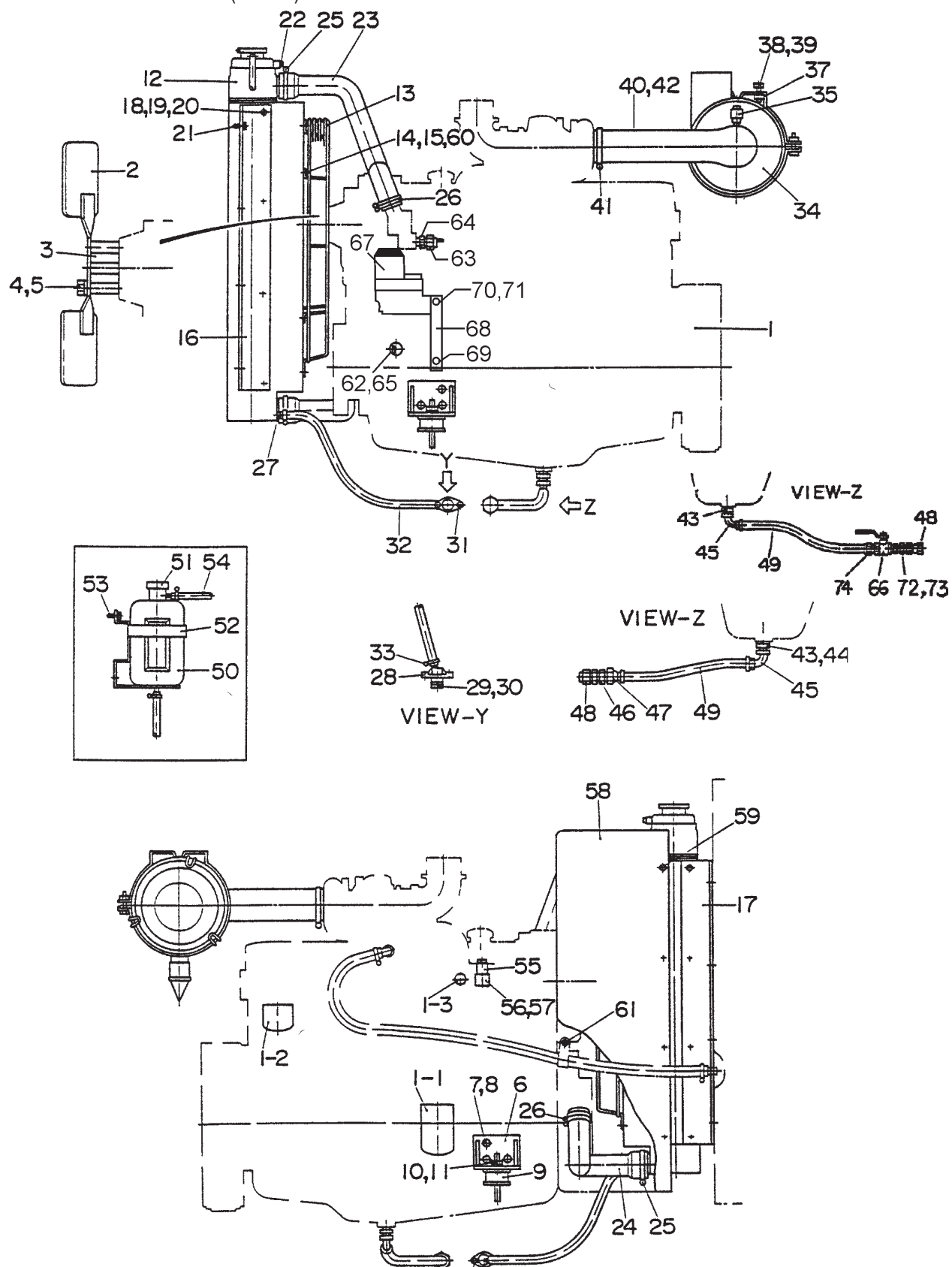
DCA-125SSJU SERIES — ENGINE AND RADIATOR ASSY.

ENGINE AND RADIATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3923200004	ENGINE	1	JOHN DEERE 6068TF
1-1	0602041290	ELEMENT, OIL FILTER	1	RE59754A
1-2	0602042590	ELEMENT, FUEL FILTER	1	RE62418
1-3	0602014297	ELECTRIC HEATER	1	RE29658
1-3	RE502668	ELECTRIC HEATER ASSY.	1	S/N 7500263-
2	0602060010	BLOWER FAN	1	422198
3	0602061000	FAN SPACER	1	R81911
4	0012110090	HEX. HEAD BOLT	4	S/N 7500001 TO 7500003
4	0012110095	HEX. HEAD BOLT	4	
5	030210250	LOCK WASHER	4	REPLACES 0042510000
6	M2303200303	ENGINE FOOT	2	
7	0131151240	HEX HEAD BOLT	6	REPLACES 0010312030
8	0040012000	LOCK WASHER	6	
9	0605000060	RUBBER SUSPENSION	2	
10	0030012000	HEX. NUT	2	
11	0040012000	LOCK WASHER	2	
12	0602011988	RADIATOR, RE52824	1	S/N 7500001 TO 7500003
12	0602012723	RADIATOR, C2810060000	1	S/N 7500308 TO 7500952
12	0602012747	RADIATOR, C281-009-003	1	S/N 7500953
12-1	0602011067	CAP	1	S/N 7500001 TO 7500307
12-1	0602011066	CAP	1	S/N 7500308~
12-2	0199101200	HOSE	1	S/N 7500308~
13	0602010795	FAN COVER, C2810044210	1	S/N 7500001 TO 7500307
14	0013006008	HEX. HEAD BOLT	8	S/N 7500001 TO 7500307
15	0043106000	PLAIN WASHER	8	S/N 7500001 TO 7500307
16	M3310200204	RADIATOR BRACKET	1	S/N 7500001 TO 7500307
17	M3310200404	RADIATOR BRACKET	1	S/N 7500001 TO 7500307
18	0013006008	S/N 7500001 TO 7500307	8	S/N 7500001 TO 7500307
19	0043006000	LOCK WASHER	8	S/N 7500001 TO 7500307
20	0043106000	PLAIN WASHER	8	S/N 7500001 TO 7500307
21	011008020	HEX HEAD BOLT	8	REPLACES 001690820
22	0468102000	PLUG	1	S/N 7500001 TO 7500307
23	M3310500003	RADIATOR HOSE, UPPER	1	S/N 7500001 TO 7500307
23	M3310500403	RADIATOR HOSE, UPPER	1	S/N 7500308~
24	M3310500103	RADIATOR HOSE, LOWER	1	S/N 7500001 TO 7500307
24	M3310500503	RADIATOR HOSE, LOWER	1	S/N 7500308~
25	0605515148	HOSE BAND	2	
26	0605515147	HOSE BAND	2	
27	0605512190	HOSE JOINT	1	
28	M2320300103	DRAIN JOINT	1	S/N 7500001 TO 7500307
29	M9200200004	DRAIN BOLT	1	S/N 7500001 TO 7500307
30	0150000018	O RING	1	S/N 7500001 TO 7500307
31	0016906020	HEX HEAD BOLT	2	S/N 7500001 TO 7500307
32	0191300580	DRAIN HOSE	1	S/N 7500001 TO 7500307
33	0605515189	HOSE BAND	2	S/N 7500001 TO 7500307
34	0602046258	AIR CLEANER	1	FRG100297
34	0602046377	ELEMENT, AIR CLEANER	1	P778214
35	0602040650	INDICATOR, AIR CLEANER	1	RBX002252
36	0603306385	NIPPLE	1	S/N 7500001 TO 7500004
37	0602040596	BAND, AIR CLEANER	1	P004076
38	011008020	HEX. HEAD BOLT	4	REPLACES 0016908020
39	020108060	HEX, NUT	4	REPLACES 0207008000
40	M337310003	HOSE, AIR CLEANER	1	
41	0605515146	HOSE BAND	1	5035
42	0605515200	HOSE BAND	1	5072
43	0602022563	ADAPTER	1	

DCA-125SSJU SERIES — ENGINE AND RADIATOR ASSY. (CONT.)

ENGINE AND RADIATOR ASSY. (CONT.)



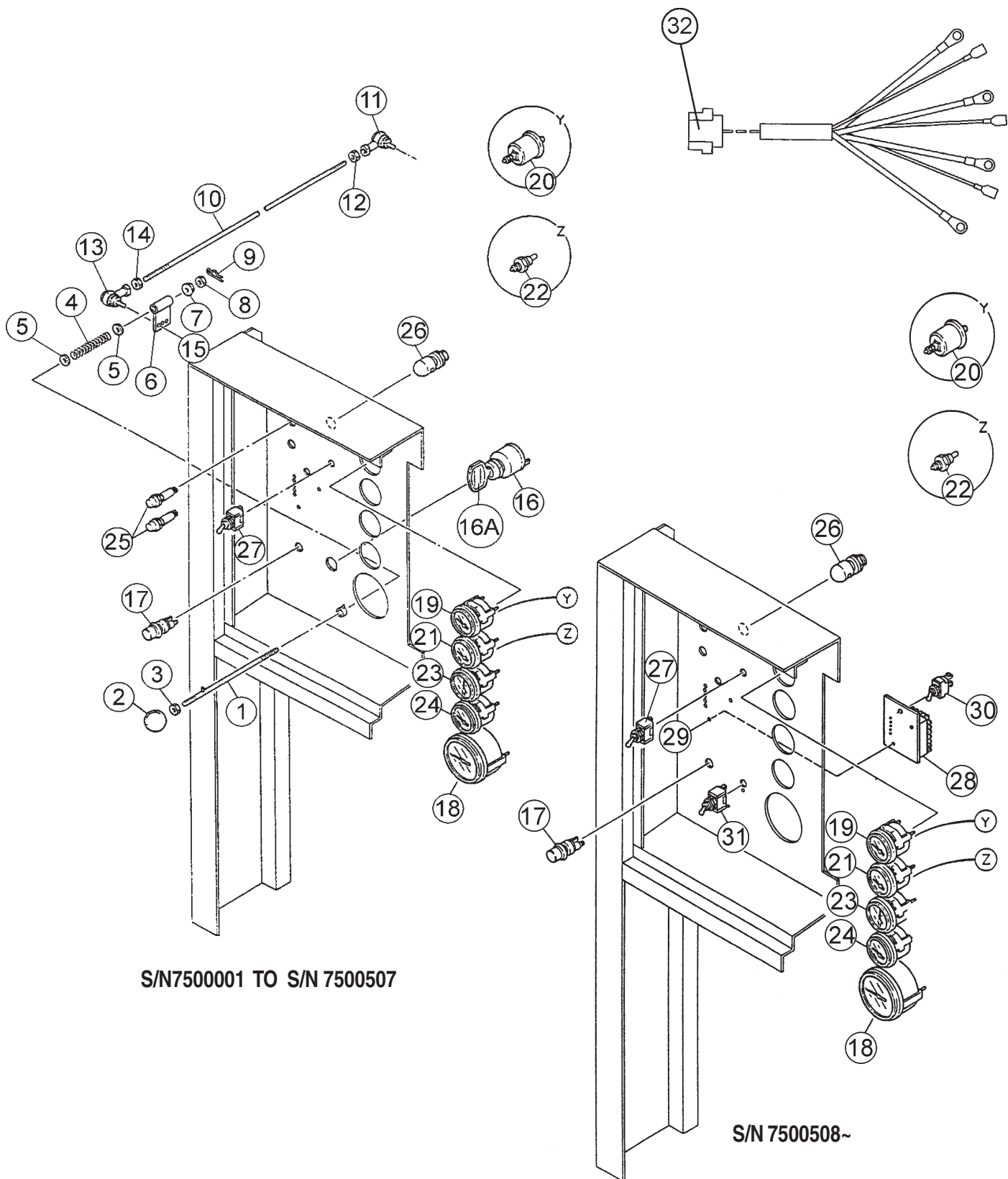
DCA-125SSJU SERIES — ENGINE AND RADIATOR ASSY. (CONT.)

ENGINE AND RADIATOR ASSY. (CONT.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
44	0602021165	O-RING	1	S/N 7500001 TO 7500307
45	0602022561	90° ELBOW	1	3398210-10+
46	0602022562	UNION, 10WTXWLS	1	S/N 7500001 TO 7500307
47	0602022792	SWIVEL, 306821010	1	S/N 7500001 TO 7500307
48	0602021070	CAP	1	10FNTXS
49	0602021573	DRAIN HOSE	1	83610 S/N 7500001 TO 7500307
49	0269200406	DRAIN HOSE	1	83610 S/N 7500263~
50	M9300000203	RESERVE TANK	1	
51	06020100900	CAP, RESERVE TANK	1	
52	M3316100104	BRACKET, RESERVE TANK	1	
53	0110080020	HEX. HEAD BOLT	2	REPLACES 0016908020
54	0193601080	HOSE	1	
55	M2260600024	RELAY BRACKET	1	
56	0602202597	RELAY, AL64309	1	S/N 7500001 TO 7500262
56	0602202592	RELAY, AT141011	1	S/N 7500263~
57	0017106015	HEX. HEAD BOLT	1	S/N 7500001 TO 7500262
57	011808015	MACHINE SCREW	2	REPL. 0027106015 S/N 7500263~
58	M3313100004	RADIATOR COVER	1	S/N 7500001 TO 7500307
58	M3313100204	RADIATOR COVER	1	S/N 7500508~
59	0110080020	HEX. HEAD BOLT	4	REPLACES 0016908020
60	0043006000	LOCK WASHER	8	S/N 7500001 TO 7500307
61	0110080020	HEX. HEAD BOLT	1	REPLACES 0016908020
62	0602122281	OIL SWITCH	1	1718939011
63	0602123282	WATER SWITCH	1	1518183041
64	M9200100404	ADAPTER	1	
65	M9200100704	ADAPTER	1	S/N 7500004~
66	0605511395	VALVE, XV500P8	1	S/N 7500508~
67	DYNC700250000012	ACTUATOR	1	REPL. 0602150093 S/N 7500508~
68	M3356200004	STOPPER BRACKET	1	S/N 7500508~
69	0016910015	HEX. HEAD BOLT	1	REPL. 0017110020 S/N 7500508~
70	0016906020	HEX. HEAD BOLT	1	S/N 7500508~
71	0207006000	HEX. NUT	1	S/N 7500508~
72	0603306590	CONNECTOR, 10WFTXS	1	S/N 7500508~
73	0603300285	ROCK UNIT, 10WLN	1	S/N 7500508~
74	0603306395	HOSE JOINT, 30182810	1	S/N 7500508~
75	0602011491	FAN BELT	1	

DCA-125SSJU SERIES — ENGINE OPERATING PANEL ASSY.

ENGINE OPERATING PANEL ASSY.



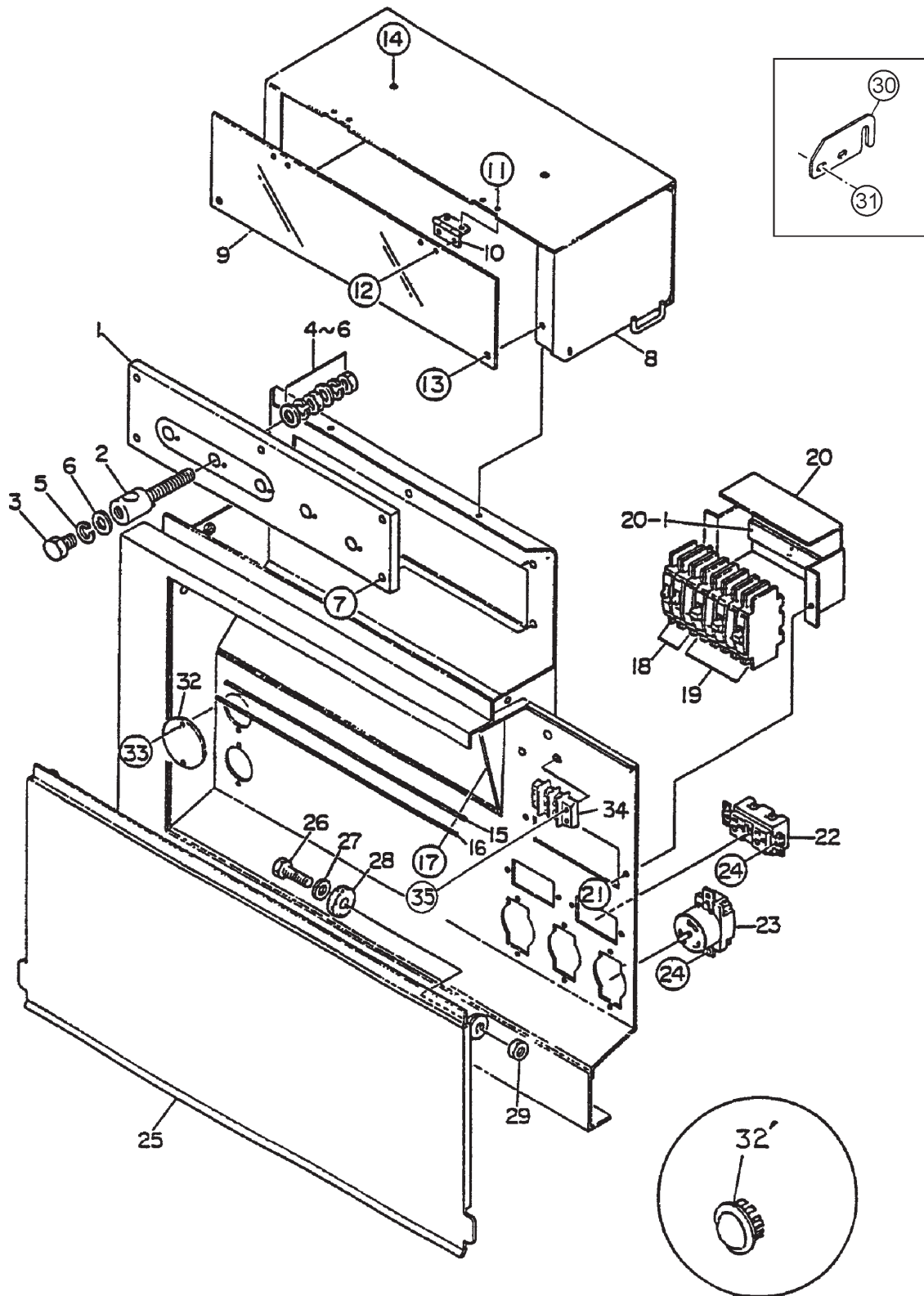
DCA-125SSJU SERIES — ENGINE OPERATING PANEL ASSY.

ENGINE OPERATING PANEL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M1354300304	SLIDE LEVER	1	S/N 7500001 TO 7500507
2	M9320000004	KNOB	1	S/N 7500001 TO 7500507
3	0036003000	HEX. NUT	1	S/N 7500001 TO 7500507
4	0605804150	SPRING	1	S/N 7500001 TO 7500507
5	0041208000	PLAIN WASHER	2	S/N 7500001 TO 7500507
6	M1354200004	BRACKET	1	S/N 7500001 TO 7500507
7	0207008000	HEX NUT	1	S/N 7500001 TO 7500507
8	0030008000	HEX NUT	1	S/N 7500001 TO 7500507
9	0605010550	SNAP PIN	1	S/N 7500001 TO 7500507
10	M3354300104	GOVERNOR ROD	1	S/N 7500001 TO 7500507
11	0602180106	BALL JOINT, LHSA8DE161	1	S/N 7500001 TO 7500507
12	0030008000	HEX NUT	1	S/N 7500001 TO 7500507
13	0602180107	BALL JOINT, LHSA8DLE161	1	S/N 7500001 TO 7500507
14	0036508000	HEX NUT	1	S/N 7500001 TO 7500507
15	0207006000	HEX NUT	2	S/N 7500001 TO 7500507
15	0041206000	PLAIN WASHER	2	S/N 7500001 TO 7500507
16A	AR51481	KEY, STARTER SWITCH	1	S/N 7500001 TO 7500507
16	0602100056	STARTER SWITCH, AR58126	1	S/N 7500001 TO 7500507
16	0602100028	SET NUT, R44342	1	S/N 7500001 TO 7500507
16	0602100029	SET WASHER, A4827R	1	S/N 7500001 TO 7500507
17	0601831594	COLD STARTER BUTTON, R39554	1	S/N 7500001 TO 7500342
17	0601831585	COLD STARTER BUTTON	1	S/N 7500343~
17	0601831584	CAP, T55585	1	S/N 7500001 TO 7500342
17	0601831588	CAP, 44053	1	S/N 7500343~
18	0602120096	TACHOMETER	1	103678
19	0602122093	OIL PRESSURE GAUGE	1	100174
20	0602122272	UNIT, OIL PRESSURE	1	
21	0602123092	WATER TEMPERATURE GAUGE	1	100182
22	0602123261	UNIT, WATER TEMPERATURE	1	0202500
23	0602121080	CHARGING AMMETER	1	100158
24	0602125090	FUEL GAUGE	1	100176
25	0602103092	ALARM LAMP, PL05	2	S/N 7500001 TO 7500507
25	0601810245	BULB, E10T10 DC18V	2	S/N 7500001 TO 7500507
26	0601810141	PANEL LIGHT	1	9826800370
27	0601831330	SWITCH, PANEL LIGHT	1	900001
28	ECU9988NJD	ENGINE CONTROLLER	1	REPLACES 0602202545
29	0027104035	MACHINE SCREW	2	S/N 7500508~
29	0030000400	HEX. NUT	2	REPL. 0207004000 S/N 7500508~
30	0601831340	SWITCH, 7562K4	1	S/N 7500508~
30	0600500091	NAME PLATE	1	S/N 7500508~
31	0601831395	SWITCH, 7302K36	1	S/N 7500508~
32	M3357200002	WIRE HARNESS, ENGINE	1	S/N 7500001 TO 7500262
32	M3357200012	WIRE HARNESS, ENGINE	1	S/N 7500263 TO 7500507
32	M3359200302	WIRE HARNESS, ENGINE	1	S/N 7500508~

DCA-125SSJU SERIES — OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY.



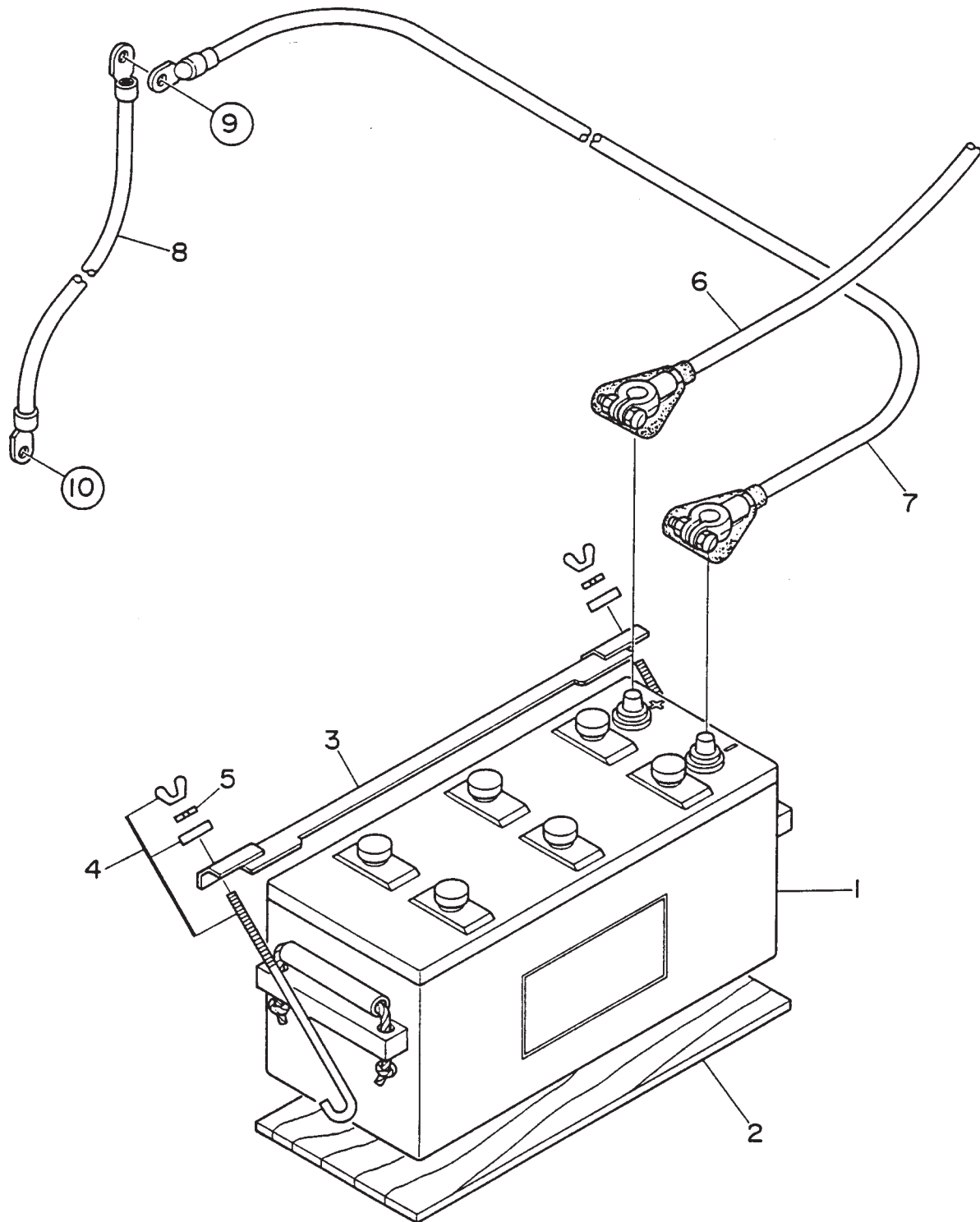
DCA-125SSJU SERIES — OUTPUT TERMINAL ASSY.

OUTPUT TERMINAL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3230700003	TERMINAL PANEL	1	
2	M9220100304	OUTPUT TERMINAL BOLT	5	
3	M9220100404	TIE BOLT	5	
4	0039316000	HEX. NUT	10	
5	0040016000	LOCK WASHER	15	
6	0041416000	PLAIN WASHER	20	
7	0012108035	HEX. HEAD BOLT	5	REPLACES 0016908035
8	M3236100303	TERMINAL COVER	1	S/N 7500001 TO 7500307
8	M3236100313	TERMINAL COVER	1	S/N7500308 TO S/N7500507
8	M3238100103	TERMINAL COVER	1	S/N7500508~
9	M3236100104	OUTPUT WINDOW	1	
10	0605010040	HINGE	2	
11	0027103010	MACHINE SCREW	4	
11	0207003000	HEX. NUT	4	REPLACES 0030003000
11	0041203000	PLAIN WASHER	4	
12	0027103010	MACHINE SCREW	4	
12	0207003000	HEX. NUT	4	REPLACES 0030003000
13	011206020	HEX. HEAD BOLT	2	REPLACES 0016906020
14	0016906015	HEX. HEAD BOLT	4	
15	M2236400004	CABLE OUTLET COVER	1	S/N 7500001 TO 7500034
15	M3236400004	CABLE OUTLET COVER	1	S/N 7500035~
16	M2236300004	SUPPORTER,CABLE OUTLET COVER ..	1	S/N 7500001 TO 7500034
16	M3236300004	SUPPORTER,CABLE OUTLET COVER ..	1	S/N 7500035~
17	011206020	HEX. HEAD BOLT	6	REPLACES 0016906020
18	0601808803	CIRCUIT BREAKER	2	Q0U 120B 1P 20A
19	0601808804	CIRCUIT BREAKER	3	Q0U 250B 2P 50A
20	M1260700304	BREAKER FITTING COVER	1	
20-1	0222100150	CUSHION RUBBER	1	
21	011206020	HEX. HEAD BOLT	2	REPLACES 0016906020
22	0601812597	RECEPTACLE, GF530EM 125V 20AX2 ...	2	REPLACES 0601812598
23	0601811034	RECEPTACLE, CS6369 250V 50A	3	REPLACES 0601812538
24	0021304015	MACHINE SCREW	10	REPLACES 0027104015
24	0030004000	HEX. NUT	10	REPLACES 0207004000
25	M3236100203	TERMINAL COVER	1	S/N 7500001 TO 7500034
25	M3236100213	TERMINAL COVER	1	S/N 7500035~
26	012212045	HEX. HEAD BOLT	2	REPLACES 0010112045
27	031112230	PLAIN WASHER	2	
28	M9310200004	STAY RUBBER	2	
29	0030012000	NUT	2	
30	M2354200004	SUPPORTER, GOVERNOR ROD	1	S/N 7500001 TO 7500507
31	0016906015	HEX. HEAD BOLT	2	S/N 7500001 TO 7500507
32	M3455600004	PLUG	2	S/N 7500508~
32	0603306775	PLUG	2	S/N 7500508~
33	0021304015	MACHINE SCREW	4	REPLACES 0027104015
		.....		S/N 7500508~
34	0601815194	TERMINAL, 6041GP02	1	S/N 7500508~
35	0021304015	MACHINE SCREW	2	REPL. 0027104015 S/N 7500508~

DCA-125SSJU SERIES — BATTERY ASSY.

BATTERY ASSY.



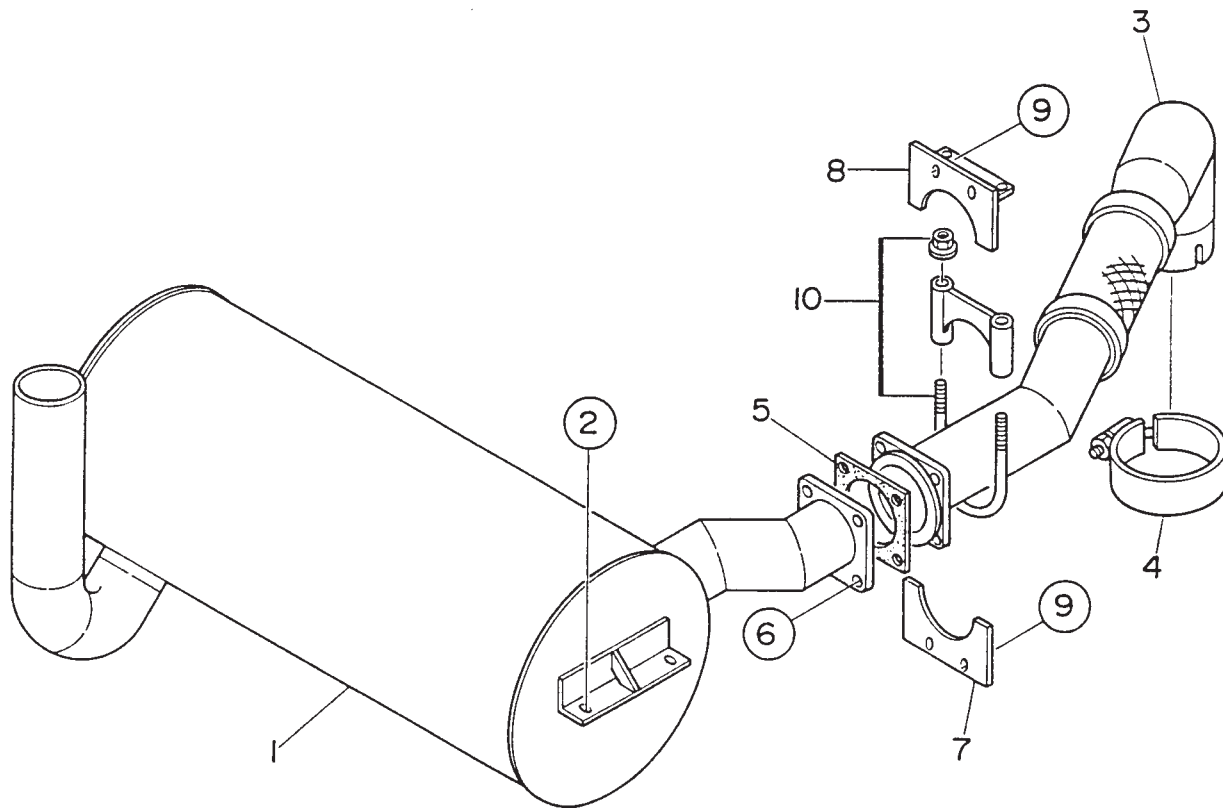
DCA-125SSJU SERIES — BATTERY ASSY.

BATTERY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	0602220196	BATTERY	1	4D-2
2	M9310500404	BATTERY SHEET	1	
3	M9103000504	BATTERY BAND	1	
4	0602220921	BATTERY BOLT SET	2	
5	0040006000	LOCK WASHER	2	
6	M3346900004	BATTERY CABLE	1	
7	M3346900104	BATTERY CABLE	1	
8		CABLE	1	MAKE LOCALLY
9	0017112025	HEX. HEAD BOLT	1	
9	0040512000	TOOTHED WASHER	1	
10	0017110020	HEX. HEAD BOLT	1	
10	0040510000	TOOTHED WASHER	1	

DCA-125SSJU SERIES — MUFFLER ASSY.

MUFFLER ASSY.



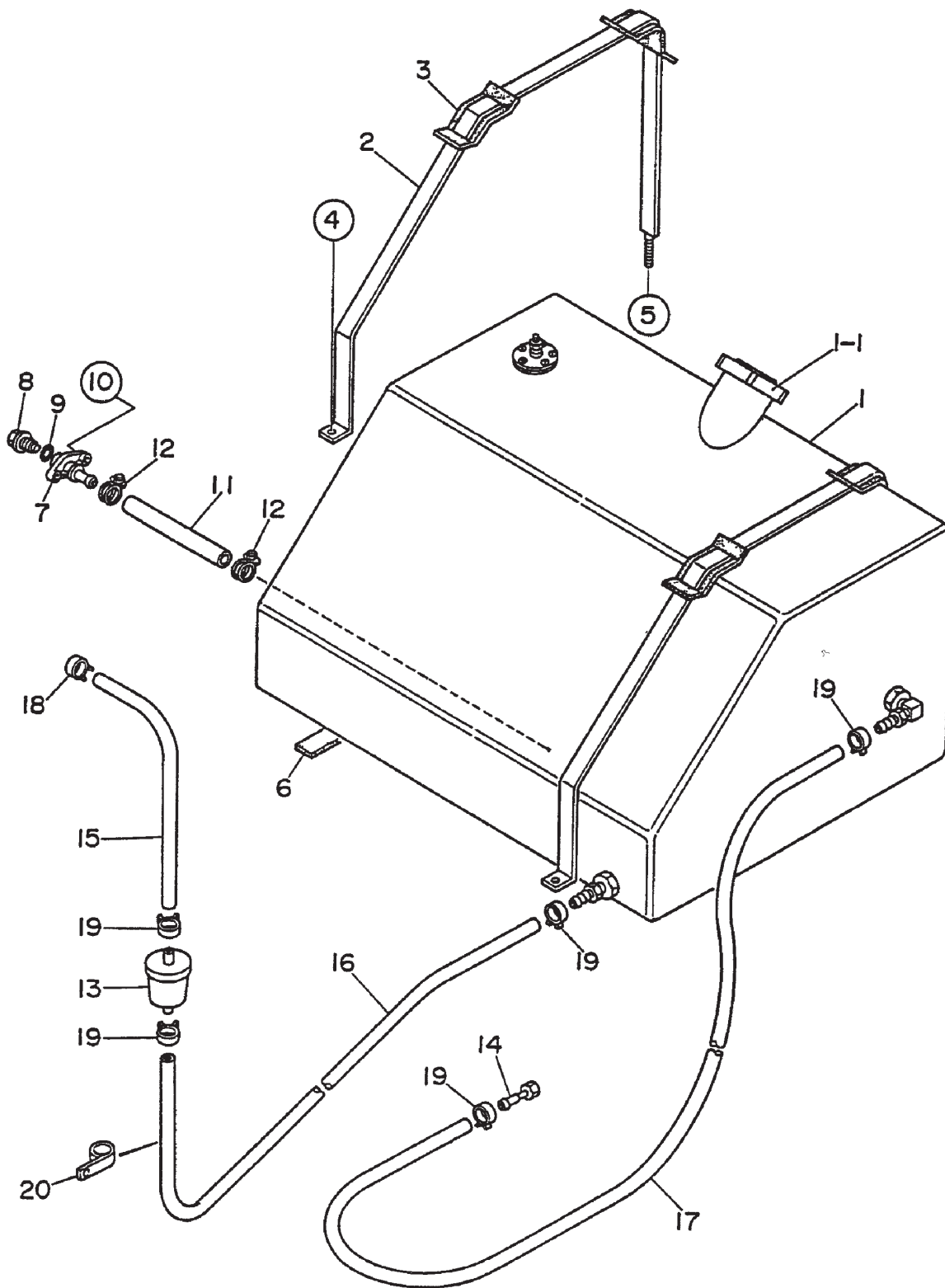
DCA-125SSJU SERIES — MUFFLER ASSY.

MUFFLER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3330100002	MUFFLER	1	S/N 7500001 TO 7500072
1	0602300167	MUFFLER	1	S/N 7500073~
2	012210025	HEX. HEAD BOLT	4	REPLACES 0016910025
3	M3333000303	EXHAUST PIPE	1	
4	0602325066	CLAMP	1	
5	M3333200004	GASKET	1	
6	014210040	HEX. HEAD BOLT	4	REPLACES 0017110040
7	M33330400304	COVER	1	
8	M3330400403	BRACKET	1	
9	011008020	HEX. HEAD BOLT	4	REPLACES 0016908020
10	0602326061	U-BOLT SET	1	89547K

DCA-125SSJU SERIES — FUEL TANK ASSY.

FUEL TANK ASSY.



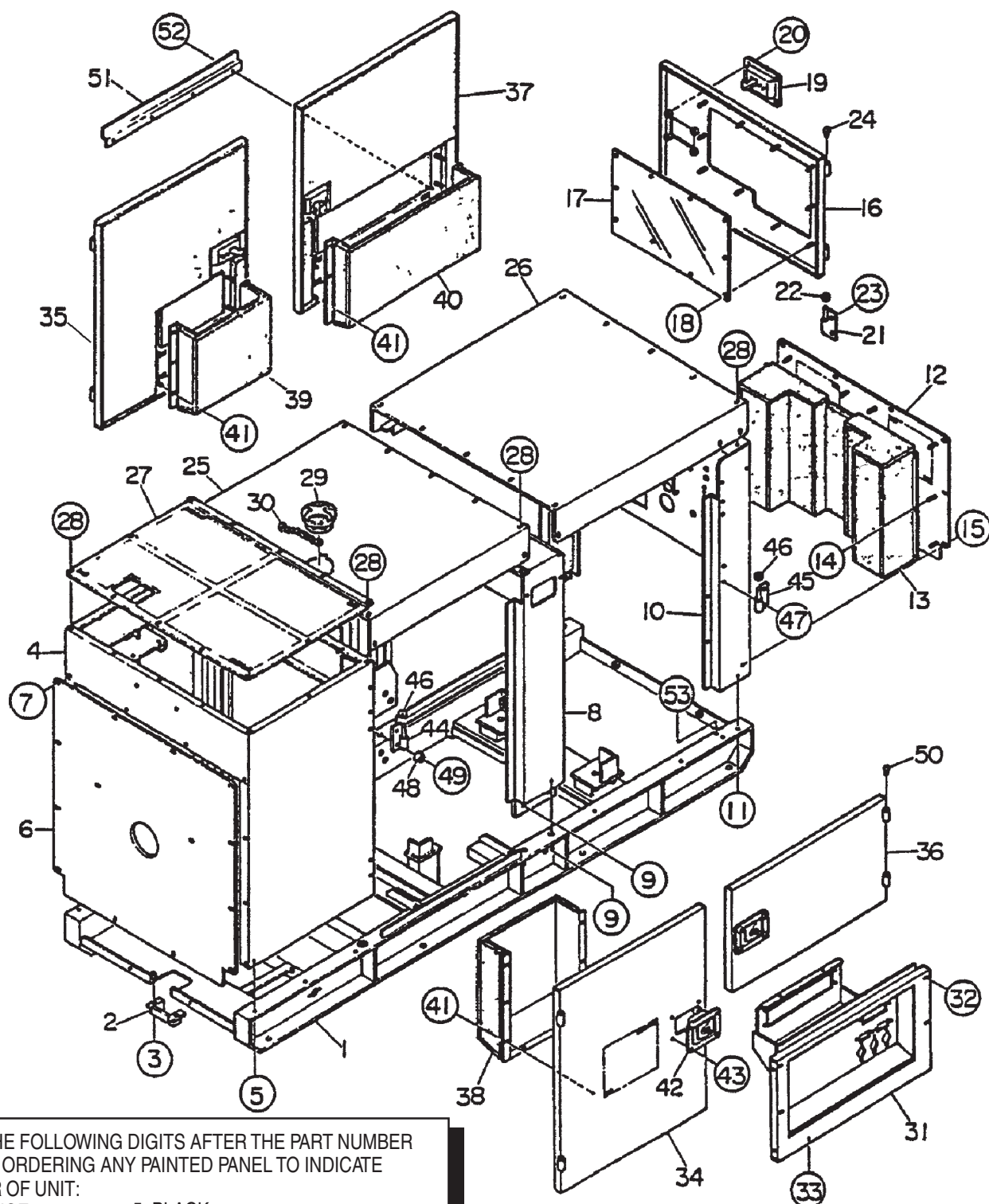
DCA-125SSJU SERIES — FUEL TANK ASSY.

FUEL TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3363000202	FUEL TANK	1	
1-1	0605505070	CAP, FUEL TANK	1	
2	M3363200204	TANK BAND	2	
3	M9310500104	SUPPORTERsheet	4	
4	0016908020	HEX. HEAD BOLT	2	
5	037908000	HEX NUT	2	S/N 7500001 TO 7500034
5	0207308000	HEX NUT	2	S/N 7500035~
5	0041208000	PLAIN WASHER	2	S/N 7500001 TO 7500034
6	0222100660	RUBBER SHEET	2	
7	M9200000003	DRAIN JOINT	1	
8	M9200200004	DRAIN BOLT	1	
9	0150000018	O RING	1	AP18
10	0016906020	HEX. HEAD BOLT	2	
11	M1363400104	DRAIN HOSE	1	
12	0605515198	HOSE BAND	2	5008
13	0602042420	FUEL FILTER	1	PTG15P
14	0602042601	LEAK-OFF LINE	1	RE67050
15	0191300450	SUCTION HOSE	1	
16	0191301802	SUCTION HOSE	1	
17	0191302200	RETURN HOSE	1	
18	0605515189	HOSE BAND	1	91004
19	0605515109	HOSE BAND	5	RS8010
20	0602220911	CLAMP	1	RCT2010

DCA-125SSJU SERIES — ENCLOSURE ASSY.

ENCLOSURE ASSY.



ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

- | | |
|-----------------|----------------------|
| 1-ORANGE | 5-BLACK |
| 2-WHITE | 6-CATERPILLAR YELLOW |
| 3-SPECTRUM GRAY | 7-CATO GOLD |
| 4-SUNBELT GREEN | |

THE SERIAL NUMBER MAY BE REQUIRED.

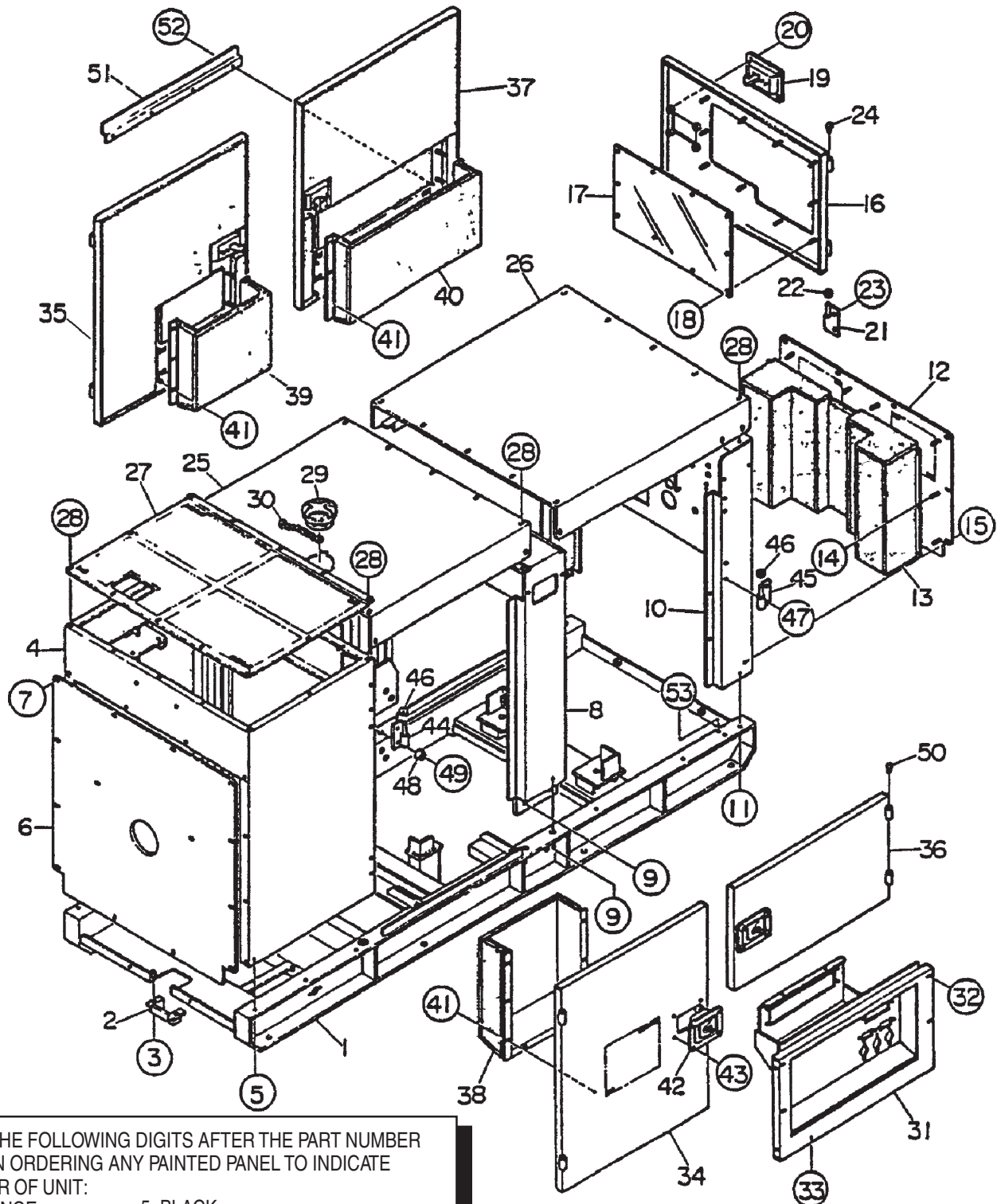
DCA-125SSJU SERIES — ENCLOSURE ASSY.

ENCLOSURE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	M3413000102	BASE	1	S/N 7500001 TO 7500307
1	M3413000112	BASE	1	S/N 7500308 TO S/N7500507
1	M3413000122	BASE	1	S/N7500508~
2	M1413400004	UNDER COVER	1	
3	012210025	HEX. HEAD BOLT	2	REPLACES 0016910025
4	M3423000302	FRONT FRAME	1	S/N 7500001 TO S/N 7500307
4	M3423000602	FRONT FRAME	1	S/N7500308~
4	M3493100203	ACOUSTIC SHEET	1	S/N7500283 TO S/N7500307
4	M3493100503	ACOUSTIC SHEET	1	S/N7500308~
5	012210025	HEX. HEAD BOLT	6	REPLACES 0016910025
6	M3423200104	COVER, FRONT FRAME	1	
6	M3493100304	ACOUSTIC SHEET	1	
7	011008020	HEX. HEAD BOLT	14	REPLACES 0016908020
8	M3433000102	CENTER FRAME	1	
8	M3493200004	ACOUSTIC SHEET	1	
9	0010114040	HEX. HEAD BOLT	12	
9	0030014000	HEX. NUT	12	
9	0040014000	LOCK WASHER	24	
9	031114260	PLAIN WASHER	24	REPLACES 0041214000
10	M3443000202	REAR FRAME	1	S/N 7500001 TO S/N 7500507
10	M3443000212	REAR FRAME	1	S/N7500508~
10	M3493300204	ACOUSTIC SHEET	1	
11	012210025	HEX. HEAD BOLT	4	REPLACES 0016910025
12	M3443300203	REAR COVER	1	
13	M3443300303	DUCT, REAR COVER	1	
13	M3493300303	ACOUSTIC SHEET	1	
14	0207006000	HEX. NUT	12	
15	011008020	HEX. HEAD BOLT	10	REPLACES 0016908020
16	M3443200103	REAR DOOR	1	S/N 7500001 TO S/N 7500148
16	M3443200113	REAR DOOR	1	S/N 7500149~
17	M3443600104	WINDOW PLATE	1	
18	0037906000	HEX. NUT	10	S/N 7500001 TO S/N 7500034
18	020106050	HEX. NUT	10	REPLACES 0207306000
		.....		S/N 7500035~
18	0041206000	PLAIN WASHER	10	S/N 7500035~
18	0041206000	PLAIN WASHER	20	S/N 7500001 TO S/N 7500034
19	B9114000002	DOOR HANDLE ASSY.	1	
20	0027106016	MACHINE SCREW	4	REPLACES 0021806015
20	020106050	HEX. NUT	4	REPLACES 0030006000
21	M9110100204	HINGE	2	
22	M9116100004	WASHER	2	
23	011008020	HEX. HEAD BOLT	3	REPLACES 0016908020
24	M9310000004	BLIND PLUG	2	

DCA-125SSJU SERIES — ENCLOSURE ASSY. (CONT.)

ENCLOSURE ASSY. (CONT.)



ADD THE FOLLOWING DIGITS AFTER THE PART NUMBER
WHEN ORDERING ANY PAINTED PANEL TO INDICATE
COLOR OF UNIT:

1-ORANGE	5-BLACK
2-WHITE	6-CATERPILLAR YELLOW
3-SPECTRUM GRAY	7-CATO GOLD
4-SUNBELT GREEN	

THE SERIAL NUMBER MAY BE REQUIRED.

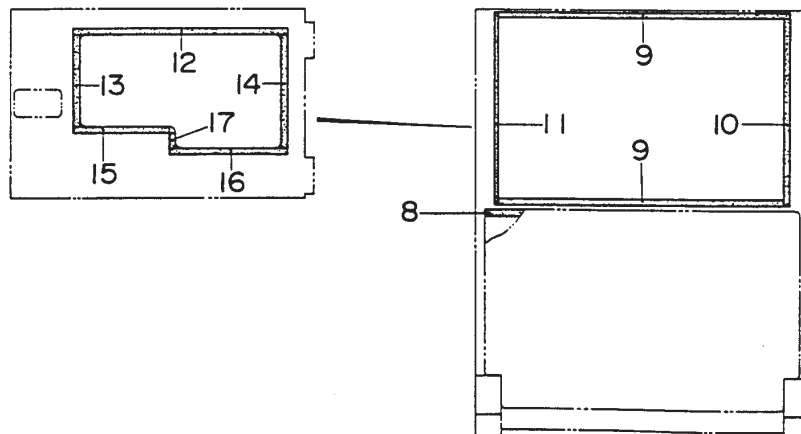
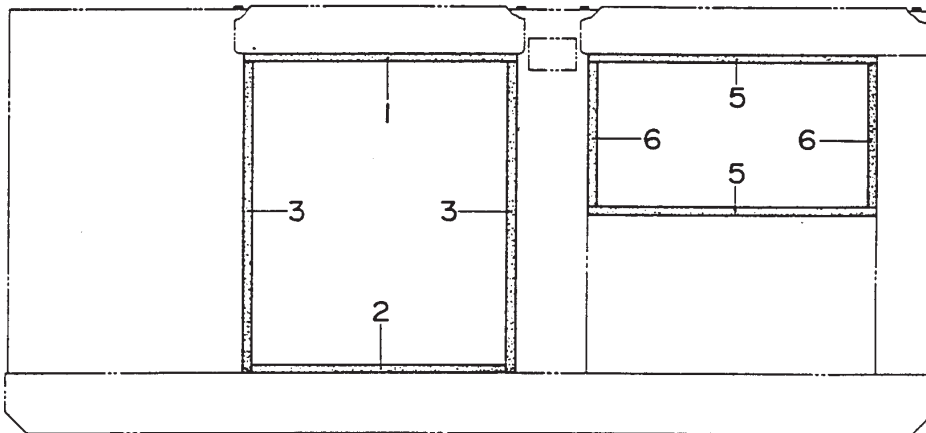
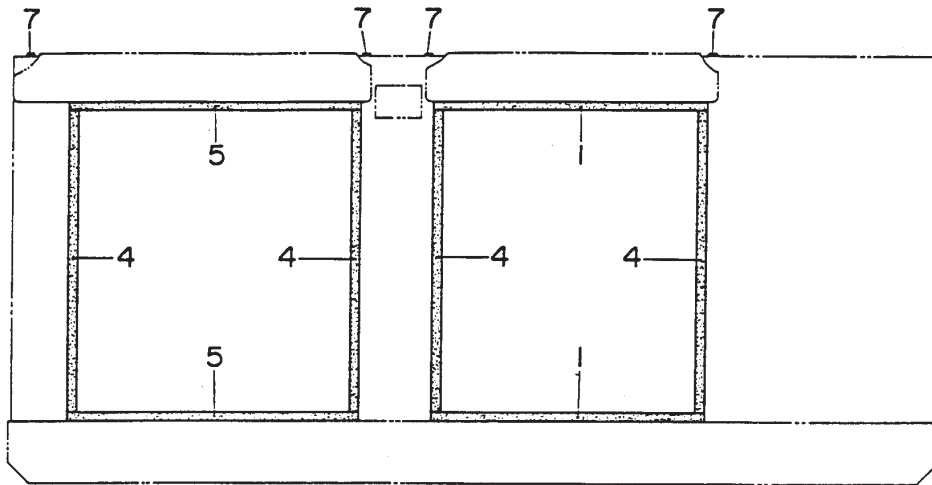
DCA-125SSJU SERIES — ENCLOSURE ASSY. (CONT.)

ENCLOSURE ASSY. (CONT.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
25	M3463100203	ROOF PANEL	1	
25	M3493500203	ACOUSTIC SHEET	1	
26	M3463200102	ROOF PANEL	1	
26	M3493500303	ACOUSTIC SHEET	1	
27	M3463500104	OVER COVER, FRONT FRAME	1	
28	011008020	HEX. HEAD BOLT	37	REPLACES 0016908020
29	M9310000103	ENCLOSURE CAP	1	
30	M1483600204	CHAIN ASSY.	1	
31	M3453200102	SPLASHER PANEL	1	S/N 7500001 TO S/N 7500034
31	M3453200102	SPLASHER PANEL	1	S/N 7500035 TO S/N7500307
31	M3453200122	SPLASHER PANEL	1	S/N 7500308 TO S/N7500507
31	M3453200132	SPLASHER PANEL	1	S/N7500508~
31	M3493401304	ACOUSTIC SHEET	1	S/N 7500001 TO S/N 7500034
31	M3493401314	ACOUSTIC SHEET	1	S/N 7500035~
32	011208060	HEX. HEAD BOLT	4	REPLACES 0016908055
33	012210025	HEX. HEAD BOLT	2	REPLACES 0016910025
34	M3453000703	SIDE DOOR	1	
34	M3493400704	ACOUSTIC KIT A.S. FRONT DOOR (L)	1	
35	M3453000603	SIDE DOOR	1	
35	M3453400804	ACOUSTIC SHEET	1	
36	M3453000503	SIDE DOOR (L)	1	
36	M3493401004	ACOUSTIC SHEET (L)	1	
37	M3453000403	SIDE DOOR (R)	1	
37	M3493401104	ACOUSTIC KIT A.S. REAR DOOR (R)	1	
38	M3453300303	DUCT (L)	1	
38	M3493400904	ACOUSTIC KIT A.S. FRONT DUCT (L)	1	
39	M3453300503	DUCT (R FRONT)	1	
39	M3493401404	ACOUSTIC KIT A.S. FRONT DOOR DUCT	1	
40	M3453300203	DUCT (R)	1	
40	M3493401204	ACOUSTIC KIT A.S. REAR DOOR DUCT	1	
41	0207006000	HEX. NUT	25	
42	B9114000002	DOOR HANDLE ASSY.	4	REPLACES M9113000002
43	0027106016	MACHINE SCREW	16	REPLACES 0021806015
43	020106050	HEX. NUT	16	REPLACES 0030006000
44	M9110100204	HINGE (L)	4	
45	M9110100304	HINGE (R)	4	
46	M9116100004	WASHER	8	
47	011008020	HEX. HEAD BOLT	9	REPLACES 0016908020
48	0601850097	DOOR STOPPER	8	
49	0027208025	MACHINE SCREW	8	
50	0845031504	BLIND PLUG	8	REPLACES M9310000004
51	M3453700004	DOOR BRACKET	1	
52	0016906015	HEX. HEAD BOLT	4	
53	016908020	HEX. HEAD BOLT	1	
53	0040508000	TOOTHED WASHER	1	

DCA-125SSJU SERIES — RUBBER SEAL ASSY.

RUBBER SEAL ASSY.



DCA-125SSJU SERIES — RUBBER SEAL ASSY.

RUBBER SEAL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	0228900890	RUBBER SEAL	3	
2	0229200810	RUBBER SEAL	1	
3	0228901020	RUBBER SEAL	2	
4	0228900990	RUBBER SEAL	4	
5	0228900955	RUBBER SEAL	4	
6	0228900470	RUBBER SEAL	2	
7	0228900470	RUBBER SEAL	4	
8	0229201040	RUBBER SEAL	1	
9	0228800970	RUBBER SEAL	2	
10	0228800590	RUBBER SEAL	1	
11	0228800630	RUBBER SEAL	1	
12	0228100665	RUBBER SEAL	1	
13	0228100300	RUBBER SEAL	1	
14	0228100370	RUBBER SEAL	1	
15	0228100280	RUBBER SEAL	1	
16	0228100365	RUBBER SEAL	1	
17	0228100070	RUBBER SEAL	1	

PAYMENT TERMS

Terms of payment for parts are net 10 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price.

Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable here under for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

[illegible]

OPERATION AND PARTS MANUAL

HERE'S HOW TO GET HELP

*PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING*

PARTS DEPARTMENT

800-427-1244 or 310-537-3700

FAX: 800-672-7877 or 310-637-3284

SERVICE DEPARTMENT

800-421-1244

FAX: 310- 537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310- 631-5032

WARRANTY DEPARTMENT

888-661-4279, or 310-661-4279

FAX: 310- 537-1173



MULTIQUIP INC.

18910 WILMINGTON AVE.

CARSON, CALIFORNIA 90746

310-537-3700

800-421-1244

FAX: 310-537-3927

E-mail: mq@multiquip.com • www.multiquip.com

PARTS DEPARTMENT:

800-427-1244

FAX: 800-672-7877

SERVICE DEPARTMENT:

800-835-2551

FAX: 310-638-8046